



ANNALS OF INDIAN ADMINISTRATION.

VACCINATION IN THE MADRAS PRESIDENCY.

1858.

Madras Records, No. LXV.

ON the 28th October 1859 the Director General of the Medical Department forwards to Government a report on vaccination in the Madras Presidency during the year 1858. There was a slight decrease in the number of vaccinations. In 1857 there were 385,000, in 1858 there were only 379,732, being a decrease of 5,468. Since 1855 the numbers have shown a gradual decrease. Several reasons are assigned for this. The Vaccinators were men of no education, and not fit to be entrusted with the important duties for which they were employed; there was a want of general supervision; the prejudices of the natives were frequently opposed to the operation. In Tanjore the falling off was very marked, being from 55,922 in 1854 to 16,531 in 1858. With reference to this the Government order says "that, in this district at all events, the Vaccinators have either greatly relaxed their exertions, or if the present statements be faithful, have during the four preceding years submitted returns grossly fictitious." The decrease was in twenty-two of the districts; the increase was in twelve. The greatest decrease was in Tanjore, 16,689; Cuddapah, 3,252; Salem, 2,642; and Trichinopoly, 2,538. The greatest increase was in Mysore, 18,106; and Vizagapatam, 2,242. A competent Vaccinator ought to vaccinate 2,100 annually. The number was below this in every district except Madura, where it was 2,233. The average number was only 1,104. In fifteen districts the number exceeded the average; in nineteen it was below. The Direc

tor General suggested on a previous occasion the appointment of warrant officers to act as circuit Vaccinators. The extra expense would be Rs. 24,840 per annum, and he now suggests the renewal of the system of circuit Superintendents. Government was not prepared to sanction the additional outlay.

The people of India are not favourably inclined towards vaccination. Caste prejudices, ignorance of the benefits which the operation secures, and inability on the part of the operators, are the chief obstacles to be surmounted. Government, however, are not prepared to sanction the enforcement of vaccination by regulation or by legal enactment. It was proved from an examination of prisoners in some of the Jails, that from 70 to 80 per cent. of the number incarcerated bore distinct marks of small pox, while only 8 per cent. bore marks of vaccination. In the town of Madras the average rate of death from small pox is one per thousand on the assumed population, 700,000. In the whole Presidency the annual number of deaths may be estimated at 20,000, estimating the population at 20 millions. A treatise on vaccination and small pox by Dr. Maclean, and translated by Dr. Shortt, into Tamil, Telugu and Hindustani, was circulated throughout the various districts, but this and similar measures have not as yet been attended with much success. The year showed a slight decrease in the number of operations performed by Medical Subordinates.

The total expenditure for 1858 was Rs. 29,633-5-7, being a decrease of Rs. 6,383-13-3 on 1857. The lowest cost per 100 vaccinations was 5-12-8 in Madura; the highest 28-11-2 in Ganjam. The number of children under one year of age vaccinated showed an increase, but did not exceed 8 per cent. on the births.

At Bellary there was a slight increase in the number of vaccinations, but throughout the district generally the results were not encouraging. At Calicut the decrease in the number of vaccinations was accounted for by the absence of the circuit Superintendent. In Chicacole there was an increase of 1,983, and the number would have been larger had the village officials afforded any assistance. At Chingleput there was a decrease of 150, partly owing to the prevalence of epidemic diseases and partly to indisposition among the Vaccinators. Dr. Shortt says that in going over his district he found a large proportion of the operations reported as successful, to have been failures. He found the objections to vaccination greater in some villages than in others. Only about 25 per cent. of the population in seven out of his ten taluks were protected by vaccination. During 1858 small pox was very prevalent in Chingleput. The excuses for

rejecting vaccination were very silly and trifling. The objects of Dr. Shortt's tour were, to ascertain the genuineness of the lymph; to test the correctness of the returns; and to impress on the natives of the villages the benefits of vaccination. In Cuddalore the lymph in use was good, and a constant supply was kept up in the dispensary for persons applying for it. There was an increase here, which is partly attributed to the dearness of articles of domestic consumption, "numbers bringing in children to be vaccinated, doing so, perhaps, more for the sake of the rice than from any desire to avail themselves of the advantages of the prophylactic." The proportion of successful cases to unsuccessful was $29\frac{3}{4}$ to 1. Of the province of Honore it is reported that the climate is peculiarly favourable to vaccination, and for the preservation of the lymph. Innoculation was practised here in conformity with the directions contained in the Shastras, and even the distinction of inoculating the males on the right side and females on the left, was strictly attended to.

Mr. Clarke, the Collector of Madura, says that the natives of that province believe vaccination to be a seal of the Christian religion, and they therefore oppose it. Others oppose it on the ground of fatalism; and some lose all faith in its efficacy from having seen one or two failures. The reports from the other stations contain details of the working of the system, but do not present any new information. The following statement exhibits the number of persons vaccinated from 1844 to 1858. It will be seen that there is a gradual increase up to 1855, and from that year there is a falling off.

**COMPARATIVE STATEMENT OF THE NUMBER VACCINATED IN THE UNDERMENTIONED
YEARS, VIZ., FROM 1844 TO 1858.**

Years.	Europeans, &c.		Hindoos.		Mahomedans.		Total.		Successful.	Unsuccessful.	General Total, Males and Females.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.			
1844	4,937	4,017	73,821	53,925	11,313	5,787	90,071	68,729	...	...	158,800
1845	5,645	4,523	78,356	64,761	11,415	6,351	95,416	75,635	...	...	171,051
1846	6,376	4,857	75,658	61,249	10,189	5,303	92,223	71,609	...	...	163,832
1847	5,338	4,505	73,931	59,779	10,148	5,323	89,417	69,607	147,523	11,501	169,024
1848	6,253	5,031	85,555	69,144	10,632	5,479	102,440	79,654	167,974	14,120	182,094
1849	7,148	5,685	88,959	72,049	10,719	5,625	106,826	83,359	175,407	14,778	190,185
1850	7,393	5,947	95,377	78,440	11,154	5,786	113,924	90,173	189,927	14,170	204,097
1851	9,284	7,303	119,214	93,762	12,327	7,108	134,825	108,173	236,645	16,353	242,998
1852	8,604	6,557	140,468	118,276	12,629	7,351	161,701	132,184	272,987	20,898	293,885
1853	5,853	4,615	158,833	133,210	12,212	7,094	176,928	144,919	298,421	23,426	321,847
1854	1,476	1,088	206,530	174,574	14,737	8,484	222,743	184,146	378,962	27,927	406,889
1855	1,401	1,192	210,006	176,757	13,350	7,666	224,757	185,615	378,389	31,983	410,372
1856	1,309	1,061	194,122	164,325	13,097	7,045	208,523	173,034	347,986	33,576	381,562
1857	1,628	1,466	185,326	154,850	13,063	7,407	200,017	163,723	328,749	34,991	363,740
1858	2,591	1,850	183,531	149,739	13,475	7,540	199,597	159,129	326,020	32,706	358,726

CIVIL JUSTICE IN THE MADRAS PRESIDENCY

1859.

THE Report for this year consists merely of tabular statements, unaccompanied by any remarks. The most important particulars are the following:—

Suits instituted in 1859	1,56,815
Ditto in 1858	1,34,575

Nearly 86 per cent. of these are on account of debts, wages, &c. 12 per cent. connected with land, and 2 per cent. with caste, religion, indigo, sugar, silk, &c.

Original suits in favour of plaintiff	47,437
Ditto in favour of defendant	6,711

AVERAGE DURATION OF SUITS.

	1855.			1858.			1859.		
	Yrs.	Ms.	Ds.	Yr.	Ms.	Ds.	Yr.	Ms.	Ds.
Sudder Adawlut ... ..	...	3	15	...	3	26	...	3	10
Civil Judges	1	11	15	1	3	27	1	8	12
Subordinate Judges	2	1	3	1	3	8	1	1	2
Assistant Judges	2	2	3	1	11	7	...	...	...
Principal Sudder Ameens	2	...	27	...	11	1	...	9	19
Sudder Ameens ... ..	...	7	24	...	7	29	...	10	2
District Moonsiffs ... ..	...	7	8	...	7	11	..	7	14

The total value of suits depending at the end of the year was Rs. 2,31,92,613.

The report contains statements of the work of the various judicial authorities, comparing the results with those of the four previous years, which may be summarised as follows:—

	1858.	1859.
Before Punchayets	99	124
Village Moonsiffs	28,557	32,174
District Moonsiffs	1,62,783	1,84,856
Sudder Ameens	4,145	4,797
Principal Sudder Ameens.		
Original	1,013	767
Appeal	3,783	3,779
Assistant Judges.		
Original ... ..	...	...
Appeal	280	...

				1858.	1859.
Subordinate Judges.					
Original	...	...	...	919	1,471
Appeal	...	...	...	2,006	1,841
Civil Judges.					
Original	...	...	...	3,519	2,815
Appeal	...	...	...	10,627	10,536
Sudder Adawlut.					
Regular	...	...	...	50	47
Special	...	...	...	216	257

BOTANICAL AND HORTICULTURAL GARDENS AT OOTACAMUND.

1858-59.

MR. W. G. McIvor, the Superintendent of the Government Gardens, Ootacamund, submits his report for 1858-59 on the 25th October 1859. The Government order thereon requests that such reports be not so long delayed, as their value is thereby diminished.

A large number of valuable plants were added to the garden during the year. Of fruit trees 124 varieties were forwarded to Madras, but only 19 sorts reached Ootacamund in good condition. The Chinese yam was tried, and with great success, but as the potatoe thrives so well the yam is not likely to be very generally cultivated. The *Kalahatti Nursery* contains a stock of young fruit trees. The Conservator of Forests recommended its being sold, but Mr. McIvor thinks this would be a great loss to the institution. The *Ootacamund Nursery* had undergone various improvements. A new method of transplanting trees was introduced. The young plants after being removed from the seedling pots, are placed singly in 3 inch pots, for a month; they are then taken out and wrapped up in moss, upon which a little earth is sprinkled. In this way 350 can be removed in a cart, where only 30 could be removed when grown in baskets as was formerly done. This method also saves the purchase of additional nursery land. During the spring 4,000 young trees prepared on this principle were supplied for public planting. The amount realised for trees, shrubs, seeds, &c. distributed in 16 months was Rs. 2,436-1-10. The number of timber and ornamental trees introduced exceeded that of any preceding season. Considerable

difficulty was experienced in getting labour, owing to a rise of 25 per cent. in the wages of workmen at Jackatalla. The Superintendent was reluctantly obliged to raise his wages from 4½ to 5 Rs. per mensem, which was still 1 Re. below Jackatalla. Among the medical plants proposed to be introduced were the Cinchona, Henbane, Peppermint. Taraxacum and Digitalis grow freely. To grow and prepare such plants for the medical department on a large scale would require a separate establishment. The Government allowance for the gardens was £10 per mensem. There was a special grant of Rs. 1,000 for laying out a certain portion of the grounds. The total cost of the gardens, exclusive of the Superintendent's salary, was about Rs. 5,000, which was fully covered by the receipts. A slight discrepancy is however pointed out in the Government order, amounting to Rs. 329.

ABKARRY ADMINISTRATION OF THE LOWER PROVINCES.

1858-59.

On the 6th January 1860, the Junior Secretary to the Board of Revenue gave in the report on the financial results of the Abkarry administration of the Lower Provinces for the official year 1858-59.

Patna Division.—The demand in this division, including a bukya balance of Rs. 71,608, amounted to Rs. 9,82,172, of which Rs. 8,70,384 were collected, leaving a balance of Rs. 1,11,788. The remissions amounted to Rs. 36,310, and of the remainder of the balance Rs. 62,115 were realized during the 1st and 2nd quarters of the current year. The net revenue was only Rs. 872 less than that of 1857-58.

Bhaugulpore Division.—The net amount realized was Rs. 3,01,823. In Purneah a net increase of Rs. 3,647 was shown.

Rajshahye Division.—The demand amounted to Rs. 1,47,109, of which nearly the whole was collected. The net revenue was Rs. 1,96,649 which was an increase over the preceding year of Rs. 11,186. The revenue of this division has been steadily increasing since 1852. The revenue of 1858-59 exceeds that of 1851-52 by Rs. 82,619.

Dacca Division.—The revenue was Rs. 3,00,923 showing an increase of Rs. 64,457, of which the sum of Rs. 37,063 belongs

to Mymensingh. The increase was chiefly on account of spirits and drugs, exclusive of opium. The whole demand of Rs. 2,64,526 was realized with the exception of Rs. 73.

Chittagong Division.—The gross collections amounted to Rs. 95,686, and the net revenue to Rs. 67,760, being an increase of Rs. 12,563, chiefly derived from spirits and drugs exclusive of opium.

Nuddea Division.—The gross collections amounted to Rs. 11,46,758, and the net revenue to Rs. 9,87,107, being an increase of Rs. 59,735 on the previous year. This increase was principally derived from spirits and drugs, exclusive of opium.

Burdwan Division.—The returns show an increase in every district except Bancoorah, where there is a decrease of Rs. 457. The net increase of revenue was Rs. 19,321, arising chiefly from increased sales of opium in the districts of Hooghly, Burdwan and Midnapore.

Cuttack Division.—The gross collections amounted to Rs. 1,37,181, and the net revenue to Rs. 97,397, being Rs. 3,730 more than that of 1857-58. Of this increase Rs. 3,230 belongs to Cuttack.

Chota Nagpore.—The returns show an increase of Rs. 11,872 of which Rs. 5,699 belongs to Hazareebagh. The gross collections amount to Rs. 1,40,835, and the net revenue to Rs. 1,25,356.

Assam.—There was a net falling off of Rs. 4,651 owing to decreased sales of opium. The revenue derived from spirits was small. The opium sale proceeds amounted to Rs. 1,41,750.

Darjeeling.—The Abkarry revenue of this territory amounted to Rs. 3,584, and the whole was realized within the year.

Arracan.—The net revenue was Rs. 1,05,793, showing an increase of Rs. 14,943 over the previous year, of which Rs. 10,158 belongs to Akyab. The whole of the demand was realized within the year.

The general result of the year's administration shows a net revenue of Rs. 34,20,114, being a net increase of Rs. 1,97,115 on the previous year. Of the balance of Rs. 80,877, outstanding at the close of the year, Rs. 62,617 were collected during the first quarter of the current year and Rs. 2,020 remitted. The statement of persons arrested, convicted, and imprisoned, under the excise laws, is imperfect. About 770 persons were arrested in 37 districts, and of these 380 were convicted.

AGRICULTURAL EXHIBITIONS IN THE MADRAS PROVINCES.

1859.

Madras Records, No. LXIV.

ON the 7th of October 1859 the Board of Revenue laid before Government the reports on Agricultural exhibitions that had taken place during the year. Exhibitions were held in the districts of Ganjam, Rajahmundry, Masulipatam, Guntoor, Bellary, Cuddapah, Chingleput, South Arcot, Tanjore, Trichinopoly, Madura, Tinnevely, Salem, Canara, and Malabar. The general results were unsatisfactory, except in Bellary, Cuddapah, South Arcot and Canara. The experiments were not to be repeated until some time had elapsed and there was a prospect of success. The sum placed by Government at the disposal of each local committee was Rs. 5,000. The amounts expended varied from Rs. 1500 to Rs. 3,600. The total expenditure in the fifteen districts was only Rs. 35,486-10-9. Various reasons are stated to account for the comparative failure of these exhibitions. The natives had evidently misunderstood their object. Some of them had to bring their articles from a distance, others could not afford to be exhibitors and run the risk of getting no prize. Whatever may have been the causes of failure, it was evident that the principle of these undertakings must be better understood, and a spirit of generous rivalry be fostered among the natives, before much success could be looked for. But even the results that have been attained afford some ground for encouragement.

The *Ganjam* exhibition was held at Berhampore on the 25th and 26th February. About 2,000 persons visited it each day. There were 1,087 exhibitors, 103 of whom obtained prizes, to the aggregate amount of Rupees 2,386. Of the 103 who obtained prizes, 53 were ryots, 31 comities; 63 were inhabitants of Berhampore and 40 of other parts of the district. Though the articles contributed were numerous their quality was not above mediocrity. In this as in many other places it was not always easy to ascertain whether the commodities were bonâ fide productions of the district. The principal articles exhibited were ginger, fish^o oil, wheat, arrowroot, jaggery, sugar-cane, sugar, fibre, gunny bags and dungary cloth. The show of cattle was inferior. A newly discovered aromatic jungle seed was exhibited by a native. It is similar to the jecra seed in its

qualities, though not in appearance, and could be obtained at a very much smaller cost.

The exhibition at *Rajahmundry* was held on the 23rd and 24th of February. It was well attended; but though some improvement was manifested in the articles, the number of exhibitors was small. Some good samples of white cotton were exhibited, and also of various kinds of fibre including hemp; indigo, and other dyes were poorly represented. The oils were of good quality. For paddy there were sixty-three competitors, and many specimens of fine quality were exhibited. Wheat was a new production in the district; six competitors exhibited very fair samples. Pulses and oil seeds made a satisfactory appearance, but the tobacco and sugar-cane were poor. No metals were contributed. There were some good models of agricultural implements, of which the chief were, a machine for husking paddy, a new kind of sugar mill, a miniature lathe, a sowing machine, and a vertical steam engine. The cattle of this district are inferior but those exhibited show great improvement. No male buffaloes were shown and the female buffaloes were inferior.

Masulipatam.—The exhibition for this district was held at Ellore, on the 15th, 16th, 17th and 18th of February, and was attended by some hundreds of people. The show of live stock was very poor. No samples of sugar-cane were exhibited. There were some good specimens of both cultivated and jungle chay-root. A fair specimen of cotton produced from imported seed was exhibited, but in this and the other cases the quantity was below the limit. Rewards were given for some good specimens of indigo. There were some curious kinds of oil, such as crocodile oil, tiger oil, &c. the latter of which was said to be useful for medicinal purposes. The fibres were not good. There was no improvement in agricultural implements. A wind mill for beating and grinding rice was much praised, though it was not free from defects. There were some fine Ellore rugs and carpets. Of gunny bags, tent cloth and cotton carpets there were none. Prizes were offered for the best cargo-boat, and the best canal-boat; for the latter there was no competitor; the inducements were not sufficient, and the committee suggest that at any future exhibitions higher rewards may be offered. These and similar suggestions will be considered by Government when arrangements are being made for the next exhibition.

The *Guntoor* exhibition was held at Mungalagerry on the 25th April, and the attendance of native visitors was large. Some specimens of prize produce were transmitted to Madras for the exhibition there. Upon the whole no improvement on former exhibitions was manifested in this one, and the committee are of opinion that the experiment should not be attempt-

ed again. Some of the bulls and other cattle were very good. No she-buffaloes deserving of reward were exhibited. No raw cotton grown from imported seed was exhibited; but the raw country cotton was better than at last exhibition. The ordinary grains of the district were not well represented, but the wheat was good. There was no sugar-cane. The indigo was inferior, and so were the oils, and fibre. The non-agricultural class of articles were better than before. Two water-machines for raising water from a low to a high level, a model printing press, a lithographic stone, and a double barrelled percussion gun were among the articles exhibited. There was a great want of competition throughout the whole exhibition, and the Ryots, for whose benefit it was mainly intended, did not appreciate the intentions of the Government towards them.

The *Bellary* exhibition was held at that place from the 3rd to the 7th of March and was more successful than many of the others. The paddy and rice were very fine. A species of the coiraloo (a very fine millet,) which is not generally grown in this district, was exhibited, and a prize was awarded for it; it promises to be more extensively cultivated. Only one sample of coffee was shown. The fibres exhibited were better than those of last year. Thirty turkeys were exhibited which were hatched and reared in the district; this can only be done with great care. Several very good samples of indigo were contributed. No native medicines worthy of notice were produced. A few cotton plants raised by the special orders of the Collector were brought for exhibition. The best grown plant was 3 feet 4 inches high, containing not less than 34 branches and 237 pods. To encourage the growth of cotton by artificial irrigation on black lands a small reward was given for these samples.

The exhibition at *Cuddapah* was held on the 12th, 13th, and 14th January, and the result was somewhat satisfactory. There were a few specimens of live stock, including bulls, bullocks, rams, he-goats, &c., samples both of foreign and indigenous raw cotton were exhibited. The cereals were good, particularly the wheat which was very fine. There was no good sugar or sugar-cane brought forward, and the sugar candy and coffee were too small in quantity. The oil seeds were good with the exception of coriander seed. Fibres were contributed in too small a quantity, but the samples were fair. The cordage was very good. No prize could be awarded for dye stuffs, or indigo, but the show of drugs was very creditable.

The *Chingleput* exhibition was held on the 2nd February and was attended by crowds of people. Had it been held a little later in the season the show of produce would have been more satisfactory. The system is thought to be faulty. The committee

think that if the prizes were distributed according to the quantity and quality of produce per acre, the Ryots would be more incited to industry. One of the articles mentioned is, Egyptian cotton raised by Captain Templer; this article is new in the district, and its cultivation should be encouraged. The live stock was not worthy of special mention. A quantity of gums, resins, roots, and medicines had been collected and forwarded to the Madras exhibition where their value and uses would be better ascertained. The total number of articles exhibited amounted to 1450, and upon the whole the result was considered successful.

The *South Arcot* exhibition was held at Cuddalore on the 17th, 18th, and 19th of February, and during that time it was visited by 18,235 persons. The inhabitants of Pondicherry were allowed to compete on equal terms with those of the district. Few attended personally, but the articles they sent were numerous. Out of their 63 articles 19 took prizes amounting to Rs. 349. Two samples of Egyptian cotton were exhibited, one grown in the French territory. In indigo there was much competition, and the quality was much better than is usually produced in this district. No Mauritius sugar-cane was brought forward. Small quantities of coffee, turmeric and tobacco, deserve no special notice. The fibres were good but not in sufficient quantity. The live stock, implements, and machinery were a failure. Rope, gunnies and twine are scarce in the district, and the committee recommend that prizes should be offered for them on any future occasion.

The *Tanjore* exhibition was held at Combaconum on the 10th and 11th March, and was numerously attended. The number of exhibitors and of articles exhibited was smaller than in former years. The live stock was poor. Only one sample of wheat was shewn. There was but little competition in indigo; there was more in fibres and oils. The articles classed as "non-agricultural and manufactured products" were not good. No medicines or drugs were exhibited. The causes of the want of success in this exhibition were, the unfavourable season, and the shortness of the notice given.

The *Trichinopoly* exhibition was held there on the 25th and 26th February. Some little improvement on the former exhibition was shown but the general result was not very encouraging. The grains and vegetables were fair, as also the saltpetre. The sugar, indigo and cotton were very ordinary. The oils were very fine, but there was no competition. The show of fibres was extensive but not in any way remarkable.

The *Madura* exhibition was held on the 5th and 6th of January. The total number of exhibitors was 803, and of prizes 132, amounting in value to Rs. 2,635. The success attained was

less than on former occasions. There was little competition, and both the number and the quality of specimens were inferior. There were 10 samples of indigenous cotton, and only one exotic. The cattle were inferior. The shew of fibres was the best feature in the exhibition. The specimens of tobacco and cheroots were not good. Only a few specimens of dyes were shewn. Three samples of indigo were commended. The oils were good. Prizes were given for some good essences, drugs, gums and wax. The grain on the whole was of rather an inferior description, on account of the unfavourable season. The shew of implements was meagre, and many of the articles were mere rubbish. The fruits, vegetables and spices were of an ordinary character. The hides and wool were thought worthy of commendation. The poultry was good. The pottery and glass were very inferior. The collection of fabrics was said to be disgraceful, and that of sundries not much better, with the single exception of a delicately wrought bracelet.

The *Tinnevely* exhibition was held on the 20th April and though attended by a large number of Europeans and natives, the result was disappointing. The number of exhibitors was only 209. No collection of native medicines was brought forward. There were some valuable articles of produce exhibited, and samples of coffee, nutmegs, cloves, senna, and sarsaparilla were considered worthy of being sent to the Madras exhibition.

The *Salem* exhibition was held on the 9th February. The total number of prizes awarded was 155 of which natives gained 84, value Rs. 1,137, and Europeans and others gained 71, value Rs. 1,447. The Ryots took little interest in the exhibition. Most of the prizes were taken by the inhabitants of Salem and its vicinity, a few were gained by the inhabitants of the Southern Talooks. There was only one representative of the northern parts of the district. The only noteworthy articles were coffee, cotton, fibres, oils, and some dyed silk. The chief causes of failure were the superstitious notions of the Ryots, and the fear of cholera, for which Salem is notorious.

The *Canara* exhibition was held at Sircy, on the 24th February and lasted five days. Though not quite so successful as the previous exhibition it was much superior to most of the others held this year. The time for holding the exhibition unfortunately clashed with the great religious festivals at Woolvi and Gokuru. This circumstance, together with the political crisis through which Canara had passed, and the superstitious prejudices of the natives, was sufficient to account for the want of progress shown. There was considerable competition in paddy and rice; also in betel nut. The white and black pepper were of good quality. Ginger was only exhibited in small quantities, but as

it is an important article the cultivation should be encouraged. The cultivation of coffee is extending, particularly in the high-land division of North Canara. There were 19 exhibitors of whom three received prizes. The manufacture of sugar is still in its infancy in this district. One prize was awarded for the encouragement of exhibitors. Mauritius and country sugar-cane were well represented. The former kind is preferred on account of its being less easily injured by wild animals. Some good specimens of fibres were shown. Oils did not present any remarkable feature. The show of live stock was poor, and the same remark applies to agricultural implements, skins and horns.

The *Malabar* exhibition was held at Calicut on the 26th and 27th February and was not so satisfactory as was wished. The show of live stock was inferior. That of rice was pretty good. Dry grains though not so good as the former, were fair. The coffee was of excellent quality though the quantity exhibited was small. The collection of fibres, cotton, &c. was very satisfactory. The medicines formed the best class of articles in the exhibition. The gums, resins, dyes, oils, minerals and woods were comparatively inferior. The show of textile fabric was satisfactory, and the jewellery was considered good.

In the following districts no exhibitions were held this year : — Vizagapatam, Nellore, Kurnool, North Arcot and Coimbatore. The experiment has now had a fair trial and, has, to a considerable extent failed to produce any results worth the cost. The following is a statement of the expenditure incurred for the various district exhibitions, the greater portion being of course for prizes :—

Ganjam	...	...	Rs.	2,729	0	0
Rajahmundry	...	...	„	2,516	9	8
Masulipatam	...	...	„	2,229	9	2
Guntoor	...	...	„	2,639	2	11
Bellary	...	...	„	1,682	3	5
Cuddapah	...	...	„	1,819	14	9
Chingleput	...	...	„	2,000	0	6
South Arcot	...	...	„	2,793	5	3
Trichinopoly	...	...	„	1,942	6	0
Tanjore	...	...	„	1,497	6	6
Madura	...	...	„	3,665	6	0
Chingleput	...	...	„	3,711	5	1
Salem	...	...	„	2,736	11	2
Canara	...	...	„	1,477	2	1
Malabar	...	...	„	2,041	8	3

Rs. 35,486 10 9

REPORT OF THE CALCUTTA MUNICIPAL COMMISSIONERS.

1859.

ON the 15th of April 1860 the Municipal Commissioners of Calcutta submit a report to the Lieutenant Governor of Bengal on the result of their operations during the year 1859. The assets during the year amounted to Rs. 7,84,862-9-10, from which is to be deducted the expenditure, amounting to Rs. 7,05,027-14-1, leaving at the close of the year a balance of Rs. 79,834-11-9 in the Bank of Bengal. From the total assets however must be deducted Rs. 90,113-7-9, received for building sites in Bustees which had been bought up, Refund on account of lighting rate, advances accounted for by Contractors, and interest; so that the actual assets of the conservancy department, apart from the income derived from the lighting rate, amounted to only Rs. 6,94,749-2-1.

The disbursements amounted to Rs. 7,05,027-14-1 from which deducting Rs. 2,72,061-7-10, set apart for drainage, water supply, money Bustee land and re-investment, leaves Rs. 4,32,966-6-8 which was the actual expenditure.

The statement of comparative increase and decrease in the expenditure is imperfect; a more satisfactory one is promised for the next annual report. Five Conservancy accounts were opened with the Bank of Bengal, in order to keep their respective assets and appropriations distinct. The headings of the accounts are, House rate, Lighting rate, Miscellaneous (including carriage and horse tax,) Drainage and Water supply. The drainage of the town will form the subject of a separate report.

House rate.—The amount of House assessment bills was Rs. 5,35,683-14-6, showing an increase of Rs. 36,669-15-2 over the previous year. The Commissioners recommend the advisability of registering all transfers of property in order to ascertain the actual owners, and the imposition of a small charge upon all notices of demand to dilatory rate payers, by which means the number of such notices would be materially reduced.

Lighting rate.—The revised assessment effected a considerable increase in the revenue derived from this source. The total amount of the bills Rs. 1,30,640-15-6, shows an increase of Rs. 9,266-1-10 over the preceding year, and an augmentation of 10 per cent. since the lighting rate was first brought into practical operation. The other particulars were as follows :—

	1858.	1859.
Total amount of lighting rate bills, ...	Rs. 1,21,374 14 6	Rs. 1,30,640 15 6
Amount collected, ..	1,05,718 3 0	1,28,930 4 6
Do. remitted,	3,298 12 2	14,931 9 6
Do. collected by process,	5,825 8 9	9,681 12 4
Uncollected balance 31st December,	68,961 11 2	23,102 0 2
Notices of demand by Collector, ...	Cases, 2,867	4,215
Ditto ditto Commissioner, ..	3,093	4,922
Warrants of distress,	991	1,155

The actual payments for gas and oil lights were

To the Gas Company,	Rs. 55,056 11 0
— Oil-light Contractor,	35,160 0 11

Total, ... 90,216 11 11

the other expenditure amounted to Rs. 1,09,920-6-3. The actual number of lamps lighted with gas on the 31st December was 606, against 469 in 1858 being an increase of 137, of which 70 were for the Northern and 67 for the Southern division. The number of oil lamps was 878 against 868, but 214 were removed to be replaced by gas.

Carriage and Horse Tax.—The confusion in the collection of this tax was somewhat remedied by dividing the city into four divisions to each of which a European Inspector was appointed. The amount of Bills was Rs. 86,104-4-0, against Rs. 89,209-8-0 in the preceding year. This decrease is owing to the transfer of the tax upon horses standing in the suburbs, but used in town, from the Municipal Board to the Collector in the 24-Pergunnahs. The amount collected was Rs. 85,759-2-0, showing an increase of Rs. 8,003-11-6. The expense of working the tax was heavy, being 19 per cent. on the amount collected.

The Municipal Commissioners attended the Select Committee of the Legislative Council appointed to consider the Bill for the regulation of hire of public conveyances, &c., but as the Bill was referred to a future period matters remained as they were.

Licenses.—The amount received from this source showed an increase of Rs. 207-6 on the previous year. The items were as follows :—

Building Licenses,	...	...	Rs.	1,288	6	0
Fishing,	...	...	,,	541	8	0
Public tatties,	...	...	,,	873	8	0
Illumination fees,	...	...	,,	742	0	0
Grass cutting fees,	...	...	,,	160	0	0
Shop registry fees,	...	...	,,	465	0	0
Total,				Rs.	4,060	6 0

Fines.—The number of convictions was 1,133, which produced Rs. 3,210-10 of fines: being a decrease of Rs. 3,142-12. The difference arises from the fact that the infringements of the law prohibiting the keeping of more than ten horned cattle in the town, were very few. Fines for uncleanness show a large increase; they were as follows:—

Not removing filth from houses,	1,013	against	731	in 1858
Throwing filth into public drains,	304	,,	48	,,
Not cleaning licensed tatties,	... 462	,,	322	,,

General result of rates and taxes.—The total amount of rates and taxes was as follows:—

House rate,	...	...	Rs.	5,35,683	14	6
Lighting rate,	...	...	,,	1,30,640	15	6
Carriage and Horse tax,	...	...	,,	86,104	4	0
				Rs.	7,52,429	2 0

which was apportioned in round numbers in the following manner:

To be set aside on New Drainage account,	...	Rs.	1,80,000
Ditto Water supply,	...	,,	30,000
Illumination of the town by oil and gas, and indenting for additional posts and lamps,	...	,,	1,20,000
Conservancy of the town,	...	,,	1,30,000
Road making and repairing,	...	,,	1,00,000
Watering streets,	...	,,	25,000
Drains and bridges,	...	,,	12,000
Establishments, remissions, and unrealizable bills,	...	,,	1,00,000
Street improvements,	...	,,	8,000
Repairs of aqueducts,	...	,,	10,000
Miscellaneous,	...	,,	37,000
Total,			Rs. 7,52,000

On the 31st December the Bank of Bengal held Government Promissory Notes on account of the municipality to the value of Rs. 2,24,500, showing an increase of Rs. 50,800. This increase consists of repayments of loans borrowed for local improvements, and the interest on the same. The cash balances must be considered the only available source for current expenses. They amount to Rs. 1,26,721-9-1, against Rs. 75,867-9-2 last year. With a few exceptions the new year was entered upon free from pecuniary liabilities.

Gowkhannahs.—The supply of bulls was formerly obtained from the Mofussil, where stray animals were purchased from the villagers. In some cases they were caught at the request of the local authorities. Malpractices arose out of this mode of procedure, and recourse is now only had to the open market, where Gowkhannah bulls are purchased at an average cost of Rs. 12-0-5 each, or more than three times the former price. There were, at the close of the year, at both Gowkhannahs, 40 double, 358 single, 5 Dhoon, 12 Hand, and 4 Water carts. The total cost of the Gowkhannahs was Rs. 65,666-2-3, showing a decrease of Rs. 143-3-3.

Cleansing of Roads.—The expense incurred under this head was Rs. 57,809-9-8 against Rs. 53,269-9-7 in 1858. The Conservancy carts remove refuse from the streets once in 24 hours.

Public Roads.—The results of this branch of the Conservancy department were most unsatisfactory. The quantity of stone ballast landed during the year was 35,319 tons, being a decrease of 2,254 tons on 1858, of which only 14,229 remained available at the depôts of the town. The increased price paid for the broken stone supplied by the House of Correction enhanced the cost of every 100 cubic feet of stone by 17-19 per cent. This is one of the causes of the bad condition of the roads. While in 1858 the cost of layers and repairs of streets was Rs. 4,593 per mile, the cost during 1859 was Rs. 4,957. The actual difference on the whole outlay was nearly 20 per cent.

Drains, Bridges and Tanks.—The expense incurred for repairing drains and bridges was Rs. 11,600-13-1 against Rs. 6,853-7-2 the preceding year. The amount expended by the Conservancy department for repairing railways, &c. connected with tanks was Rs. 86-14, and by private contributors Rs. 41-9-6. The subject of tanks is included under the head of "Water Supply."

Improvements, &c.—The sum of Rs. 37,000 was all that remained for improvements, after apportioning the necessary expenditure for the year. This sum being inadequate for the execution of any very important new works, it was applied to the completion of those works which had been commenced during the previous year. The Burning Ghat, the Skinning Ghat, and Nemychurn Mullick's Ghat were accordingly completed and thrown open to the public. The place formerly known as Dunkin bustee, is now occupied by Europeans, whose houses surround a new tank. The purchase of Money bustee and the sale of portions of it for building sites, was beneficial to the town as well as to the Municipal funds. The outlay for aqueducts amounted to Rs. 8,132-11 and much remains to be done. For the supply of water the annual sum of 30,000 Rs. is set apart, but the expenditure during the year, including the outlay for aqueducts, was Rs. 6,253-0-8 in excess of this sum. A new engine being required for pumping up the water from the river, a 25 H. P. condensing engine was ordered out from England, which it is intended to put up at Nimtolla Ghat for the special benefit of the Northern Division of the town.

A comparison of the municipal revenue and expenditure of the two divisions of the town showed that while the Northern yielded only Rs. 2,97,264, the municipal and conservancy expenses amounted to Rs. 3,07,004, whereas the Southern division absorbed only Rs. 2,52,342 out of a revenue of Rs. 2,62,083, so that, in fact, the surplus derived from the European quarter was applied towards the benefit of the residents in the native division.

Statistics of the Town.—The information under this head was collected in the best ways available, but the commissioners regret that the absence of any regularly appointed statist, or of any authority in themselves to enforce the communication of reliable statistics, renders all such statistics of Calcutta approximate rather than definite.

The extension of trade combined with other causes, occasioned a great increase in the number of Europeans arriving in the city. The number of passengers arriving by sea, during the year was :—

	<i>Adults.</i>	<i>Children.</i>
By the Overland route, in the P. and O. Co.'s Steamers,	1,961	120
By sailing Ships, and other Steamers, including China and the Straits, ...	1,259	204
Total arrivals, ...	3,220	324

On the other hand the number of passengers that left Calcutta by sea, was—

	<i>Adults.</i>	<i>Children.</i>
By the Overland route,	1,784	305
By sailing Vessels and other Steamers, including China and the Straits, ...	363	302
Total departures, ..	2,147	607

Thus there was an increase of 1,073 adults and a decrease of 283 children, or a net increase to the European population of Calcutta of 790 souls. These returns are exclusive of private soldiers and non-commissioned officers and their families. The arrivals and departures of Inland passengers were as follows :—

	<i>Arrivals.</i>	<i>Departures.</i>
By Railway, 1st class,	6,410	6,675
„ Inland Steamers,	2,235	1,180

In both these returns third class passengers have been omitted, as they consist entirely of natives. Summing up the whole of these arrivals and departures, we obtain the following result :—

	<i>Passengers.</i>
Arrived by the Overland route,	2,081
„ „ Sea route,	1,463
„ „ Railway trains, 1st class,	6,410
„ „ Inland Steamers,	2,235
Total,	12,189
<i>Deduct.</i>	
Departures by the Overland route,	2,089
„ „ Sea route,	745
„ „ Railway trains, 1st class,	6,675
„ „ Inland Steamers,	1,180
	10,689
Remain,	1,500

who form the increase to the fixed population during the past year, exclusive of the addition by local births, and minus the number of persons who died during the same period. The only other means of travelling are by Dawk or by Boat. By the former very few start from Calcutta, whilst the passengers by latter are almost entirely planters and others who have their own Boats ; but upon the whole it may be safely assumed, that the number of arrivals and departures by the presaid conveyances are about equal. In the absence of any census the population of the town remains unknown.

Not a single public building was either erected or commenced during the year. The total number of building licenses applied for during 1859, was sixteen, of which eight were for one-storied, and eight for two-storied houses. In the preceding year the total number of pukka or brick-built dwellings, amounted to 13,363, and hence those for the erection of which licenses have been applied for during the year under review, exhibit an increase of 0.06 per cent., in spite of an increasing permanent and floating population of the town, and the high rents exacted by proprietors of houses. The number of deaths in the *fixed* Christian population was greater than the previous year, being 701 against 672 in 1858. The deaths in the floating population fell from 1029 to 257, which was owing to the number of troops, &c. moved up in 1858. The total number of deaths registered was 958, of which 678 were males and 280 females. They comprised

666 Protestants.
247 Roman Catholics.
22 Armenians.
20 Chinese.
3 Malays.

who died of the following causes ;

136 of Fever.	6 Stillborn.
183 „ Cholera.	28 Drowned.
163 „ Dysentery.	1 Poisoned.
37 „ Convulsions.	1 Committed Suicide.
30 „ Consumption.	10 Accidental death.
15 „ Diarrhoea.	347 Various causes.
1 „ Small pox.	

The months in which the greatest mortality occurred in 1858 were in 1859 the healthiest. Classed according to ages the deaths were as follows :—

Under	10 years of age, ...	..	...	...	190
Between	10 and 20 years, ..	...	..	..	74
"	20 " 30 " ...	..	..	..	267
"	30 " 40 " ..	..	..	..	191
"	40 " 50 " ...	..	...	...	93
"	50 " 60 " ..	..	..	..	25
"	70 " 80 " ...	...	...	...	16
"	80 " 90 " ..	..	..	..	15
"	90 " 100 " ..	..	...	...	6
Age not stated,	...	...	...	..	24

In 1858, 356 children died under 10 years of age, while in 1859 the number was only 190. From returns furnished by the Commissioner of Police it appeared that 13,942 deaths occurred among the native population, showing a decrease of 941 on the previous year; of the above number 9,796 were Hindoos and 4,146 Mahomedans. Of the 958 Christians, &c., who died during the year, 439 were interred in the Circular Road Cemetery. The Commissioners recommend the construction of burial grounds outside the city.

The number of purely European children born was 182, of whom 99 were boys and 83 girls. The European marriages were 116 in number, including the suburbs of Calcutta. The number of Europeans who died was 118, consisting of 52 males, 30 females, and 36 children. The Europeans from 10 years upwards died at the following ages :—

12	Persons	between	10	and	20
21	"	"	20	"	30
19	"	"	30	"	40
15	"	"	40	"	50
9	"	"	50	"	60
4	"	"	60	"	70
4	"	"	70	"	80
1	"	"	86		
1	"	"	87		

The greatest mortality occurred between the ages of 20 and 30. The number of deaths between 60 and 90, is equal to 12 per cent.

Return of the Mortality of the Town of Calcutta for the year 1859.

MONTHS.	SEX.		CAUSE OF DEATH.										CREED.						WHERE BURIED.									
	Male.	Female.	Fever.	Cholera.	Dysentery.	Convulsions.	Diphtheria.	Small Pox.	Scalds.	Protestants.	Roman Catholics.	Armenians.	Chinese.	Greek.	Malay.	Circular Road Burial Ground.	Roman Catholic Burial Ground.	Chinese Burial Ground.	Scotch Burial Ground.	French Burial Ground.	Military Burial Ground.	Armenian Burial Ground.	Park Street Burial Ground.	In Church.	Suburbs.			
January,	71	22	15	14	17	3	5	1	42	67	22	4	...	...	...	36	15	4	6	...	25	...	3	...	4	2
February,	56	17	4	13	13	8	3	1	39	51	22	...	...	...	...	34	12	...	...	...	21	...	4	...	2	1
March,	64	18	11	16	8	4	3	...	40	59	22	1	...	...	...	41	14	1	1	...	24	...	...	...	1	2
April,	55	26	14	22	12	3	2	1	27	51	27	2	1	...	...	34	15	1	2	...	24	1	1	...	...	...
May,	104	36	12	46	21	7	2	1	49	108	31	...	...	...	...	66	16	1	3	...	47	...	...	...	...	...
June,	58	33	12	20	15	3	4	3	34	65	22	1	...	...	...	43	13	1	4	1	26	...	...	...	...	...
July,	86	22	17	6	30	3	5	5	52	52	32	2	2	...	...	49	20	2	1	2	38	2	1	...	...	...
August,	42	10	9	12	6	5	...	...	20	30	12	6	3	...	1	26	8	3	1	1	2	4	1	3	3	3
September,	30	20	8	3	11	3	1	1	23	35	12	2	1	...	...	28	9	1	4	...	3	1	2	1	1	1
October,	26	24	6	8	8	1	3	1	23	38	8	2	1	...	1	30	8	1	3	...	3	2	1	...	...	...
November,	85	20	12	14	10	1	1	...	17	36	12	4	3	...	...	26	10	3	7	...	1	3	...	...	...	...
December,	51	22	16	9	12	4	4	1	27	41	23	4	2	...	1	26	21	2	4	...	4	2	2	...	...	...
Total,	678	280	136	183	163	37	30	15	1	393	666	247	22	20	...	3	499	164	20	41	4	218	15	16	16	25		

Ages of Persons Deceased.

	Under 10 years.	Between 10 and 20 years.	Between 20 and 30 years.	Between 30 and 40 years.	Between 40 and 50 years.	Between 50 and 60 years.	Between 60 and 70 years.	Between 70 and 80 years.	Between 80 and 90 years.	Between 90 and 100 years.	Unknown Age.	Grand Total.
Total ...	190	74	267	191	93	57	25	16	15	6	24	958

EDUCATION IN THE MADRAS PRESIDENCY.

1858-59.

Madras Records, No. LXIII.

On the 20th October 1859 Mr. Arbuthnot submitted his report on the state and progress of Public Instruction in the Madras Presidency during the official year 1858-59.

The mutinies of 1857 had led to much discussion on the subject of education. The report mentions some of the views that had been expressed by different parties, and then proceeds to review the state of education when the despatch of 1851 was promulgated, and its progress since that period. The greater part of 1855 was spent in making preliminary arrangements, so that the new system may be said to have commenced in 1856. Besides the operations of Government, great efforts were made by private individuals and Missionary Societies. The number of pupils throughout the Presidency attending schools at this time was about 20,000, of whom two-thirds were pupils of the village schools of the great Church Societies in Tinnevely, most of them belonging to the lower classes of the population.

The system pursued during the past year was rather to improve the existing schools than to establish new ones. There was a large increase however in the number of schools receiving grants. The amount granted in 1857-58 was Rs. 16,962, in 1858-59 it was Rs. 26,035. There were eight more Government

schools than the previous year while the increase in aided schools was 125. The total number of Government schools on the 30th April 1859 was 127, with 7,042 pupils; the number of inspected schools was 325 with 13,832 pupils.

University of Madras.—The historical subjects for the B. A. Examinations were reduced, and the standard in Mathematics, and Natural Philosophy for M. A. more accurately defined. At the Entrance Examination in February out of 57 candidates, 30 passed, 8 in the first class and 22 in the second. Of these 30, 15 were educated at the Presidency College, and the remainder at other institutions. The answering in language was better than on the last occasion but there was a general failure in arithmetic and geography. Of nine candidates for the degree of B. A., eight passed. At an examination in the Faculty of Medicine, the degree of Doctor was conferred on one graduate of the Madras Medical College. No candidates appeared for degrees in Law or in Civil Engineering.

Presidency College—This institution showed a satisfactory amount of progress during the year. It is more of a collegiate school than a college, and consists of a Senior and Junior Department. The Senior Department again is divided into a general and legal branch. The examination held in December showed a favourable result. The students showed an improved knowledge of the English language, and of orthography. The Junior Department showed in most respects a similar improvement.

The number of names on the roll was as follows:—

	30th April 1858	30th April 1859
General Branch	233	238
Legal Branch	36	20
	269	258

It was regretted that so many students left the College before entering the Senior Department.

Madrasa-i-Azam.—The Mahomedan institution of this name, had undergone considerable alteration. The course of instruction had been assimilated to that prescribed for the other Government schools; Hindustani being made the medium of instruction in the lower and English in the higher classes. The number of Scholars had risen to 240.

The Normal School, made satisfactory progress during the year, the number of students having increased from 496 to 603. The school was divided into four departments, viz., the Normal

class proper, the Preparatory Normal class, the Vernacular Normal class, and the Model school. To these it has been proposed to add another, for training European Army Schoolmasters. Mr. Arbuthnot mentions two hindrances to the success of the school; first, the unwillingness of the best pupils in schools to adopt the profession of Teacher; and second, the difficulty of obtaining students who use any other than the Tamil language. Three Normal schools were established during the year at Vellore, Mayavaram, and Cheyur. The total number of students being trained, in schools connected with Government was 153.

Provincial and Zillah Schools underwent little change or increase. Arrangements were pending for the establishment of schools of an intermediate class between the present Zillah schools and the Taluq schools. Their cost is estimated at from Rs. 150 to Rs. 200 per mensem. The returns of the Provincial and Zillah schools are shown in the following statement:—

Names of schools.	Number of pupils on the rolls.	
	On the 30th April 1858.	On the 30th April 1859.
Berhampore	135	130
Rajamundri	80	104
Cuddapah	73	89
Bellary	287	252
Chittur	194	160
Cuddalore	200	235
Salem	125	141
Combaconum	250	281
Madura	132	185
Calicut	205	216
Total ...	1,681	1,793

The Berhampore Zillah school was progressing favourably, but the improvement was not so great as last year. The number of Uriya pupils had increased. The school at Rajamundri showed considerable improvement. The general standard of vernacular teaching was rising. The attendance was still low. The school at Cuddapah was only about a year old and the in-

struction was therefore very elementary. The result of the examination was satisfactory. The Bellary Provincial School was in a very satisfactory state. The lower classes seemed generally to make more rapid progress in English than the upper. In History the boys of the upper did remarkably well, and also in Geography. Their knowledge of Mathematics was not equal to that of the boys in the Southern districts, but showed an improvement on the previous year. The percentage of absentees was high.

The Chittur school made on the whole satisfactory progress, particularly in English, Telugu, Arithmetic, History and Geography. The teaching of the Tamil language was inefficient. The Zillah school at Cuddalore was also favourably reported on. The Salem school had suffered on account of the frequent changes of masters, no less than five having left during a period of eighteen months.

The annual examination of the Combaconum Provincial School showed a generally satisfactory result; but there was a great inequality throughout the classes. Great inconvenience was felt on account of the changes of teachers. The scholars were rather deficient in Orthography, and provision was being made for devoting four hours a week to dictation, written translation, &c. to overcome this deficiency. The schools at Madura and Calicut had made satisfactory progress; and no special remarks were necessary regarding them. The number of Taluk schools in operation on the 30th April 1858 was 62, with an average attendance of 46, the number on the 30th April 1859 was 68, with an average attendance of 50. Much remains to be done for these schools, but progress was visible. The least promising schools were those at Nellore and Malabar.

The Tehsil, Samat, and village schools in the sub-division of Rajamundri were carried on in the same way as before. The progress of the schools was generally satisfactory but the system by which they were supported did not work well. The village communities originally agreed to pay a certain rate to support the schools, but their agreement seems not to have been entirely voluntary. They accordingly repudiated the claims made upon them. Mr. Arbuthnot suggests the imposition of a house tax for the purpose of raising funds. By this means the Ryots and the non-agricultural classes would bear the burden jointly. His report on the whole question was under the consideration of Government.

The schools in the Hill Tracts of Ganjam showed considerable improvement, the attendance in some was greater, and the opposition of the Hill chiefs was greatly on the decline. Men-

tion is made of three who took great interest in the schools established in their villages, and one had himself studied the subjects taught in the school. Geography, history and arithmetic were among the subjects studied. In writing from dictation the average number of orthographical errors was about three in every two lines.

The schools for the instruction of the Badagas in the Neilgherry Hills were handed over to the German mission shortly before the commencement of the year under review. They are ten in number, of which six were added by the missionaries. The average attendance of the ten schools was 98. There were three night schools with a total average of 25. The progress though slow was not discouraging. The language of the Badagas is a corrupt kind of Canarese. There are altogether five tribes in these Hills, viz. Badagas, Todas, Kothars, Kurambar, and Irulars. The last mentioned live low down on the slopes of the Hills. The total number is about 14,500, of whom about 13,352 are Badagas. All the tribes speak different dialects, and have very little intercourse with each other. It is not possible, at present to do anything in the way of educating the other tribes except by gradually bringing them into employment, and by their observing the advantages which the Badagas enjoy from the establishment of schools. The Kothars and Todas are very degraded; the Kurambar and Irulars live in most unhealthy localities; and all are few in number. Colonel Pears reports regarding them "that if anything is done in the way of education for these tribes, it will be absolutely necessary to have separate schools for each. Their social relations and the feelings with which they regard each other would make it quite impracticable to bring the boys of any two of the tribes into one school."

During the year the revised system of the various grades of Government schools was introduced. The Provincial schools educate up to the standard of the B. A. degree, and the Zillah schools up to the standard of the University entrance examination.

Among the Private Schools aided by Government during the year was the Doveton College, for the building of which the sum of Rs. 20,000 was sanctioned. The Church Mission boys' school at Masulipatam is one of the best in the Northern Circars. The entire expenditure was Rs. 17,073-12, of which Government contributed Rs. 1780. The Church Mission boarding school for girls at the same station is also an excellent institution. Its income was Rs. 4821-4-5 of which Rs. 544 were derived from the Government grant. In the town of Madras there are 18 aided schools. Seven of these, containing 767

male and 347 female pupils, are supported by the Scotch Free Church Mission; of the others the most important is the Doveton College. In addition to the 20,000 Rs. alluded to, Rs. 10,000 were granted by Government to this college the previous year. The attendance had however fallen off during the year under review. Mr. Arbuthnot is of opinion that to make the grants tell with more certainty on the efficiency of schools it is necessary that a certain definite standard of qualification should be demanded from the teachers employed in them. During the year book depots were established in 16 out of the 20 districts of the Presidency. The books sold were as follows:—

English,	17,785	Value, Rs. 12,058-11-2
Vernacular,	31,283	Value, „ 6744 -7-9

Total. Rs. 49,068

18,803-2-11

The system of examinations for the uncovenanted branch of the Civil Service was brought into operation this year. The first was held in November; 492 candidates appeared, of whom 18 passed according to the higher, and 187 according to the lower standard. At the next examination held in May the number of passed candidates was 34 according to the higher, and 405 according to the lower standard.

The Medical College forms the subject of a separate report, already laid before Government. The Civil Engineering College was commenced during the year. Its objects are to train candidates for the grades of sub-overscer and assistant over-seer. It contained 91 pupils at the close of the year.

The school of Industrial Arts was carried on as usual during the year. It consists of an Artistic and an Industrial department in both of which the progress was satisfactory. The arrangements for Army schools were carried out in accordance with the instructions contained in Lord Stanley's despatch of 6th October 1858. Schools were also established for the children of Christian servants of Government attached to Native Regiments at Brigade stations. The schools attached to native regiments quartered in the respective divisions were under revision. It was contemplated to unite the Ootacamund Lawrence Asylum with the Military Male Orphan Asylum at Madras.

The Report concludes with explanations regarding the statistics of expenditure and attendance. The total expenditure for the year was Rs. 5,08,151-8-5 showing a net increase of Rs. 1,00,696-13-7 over 1857-58, which arises chiefly from payments made for books purchased during previous years, and from grants-in-aid and schools for special education. The following table shows the particulars of attendance in the various provinces:—

Name of District.	Number of Government Colleges and Schools.	Number of Pupils.	Number of Private Colleges and Schools under Government inspection, and which either are or have been aided by Government grants.				Number of private schools under Government inspection which have not received grants.	Number of Pupils.	Total number of Colleges and Schools.	Total number of Pupils.	Remarks.
			Established by Missionary Societies.	Established by Natives.	Established by Europeans & Natives.	Others.					
1	2	3	4	5	6	7	8	9	10	11	12
Ganjam ...	20	514	1				1	87	22	601	
Vizagapatam	5	178					1	6	6	184	
Rajamundry	9	594					* 100	2106	109	2700	* These
Masulipatam	3	110	3	1		1		475	8	585	are the
Guntur ...	1	29							1	29	Village
Cuddapah ...	1	89							1	89	Schools
Kurnul											in Raja-
Bellary ...	1	252	1					207	2	459	mundry
Nellore ...	11	170	4		1			338	16	508	which are
North Arcot	13	599				1		107	14	706	supported
Chingleput ...	9	498	10	2				1334	21	1837	by a rate
Madras ...	7	1370	9	1		8		2060	25	3430	and under
South Arcot	9	645							9	645	Government
Salem ...	4	328							4	328	inspection.
Coimbatore...	2	98	10			1		237	13	335	
Trichinopoly	2	121							2	121	
Tanjore ...	9	736	3					378	12	1114	
Madura ...	6	391	4					107	10	498	
Tinnevely ...			162			1		5566	163	5566	
Canara ...	3	66	5	2				457	10	523	
Malabar ...	7	340	4					403	11	743	
Total ...	122	7128	216	6	1	12	102	13873	459	21001	

The appendix contains various detailed statements, and examination papers.

THE DEHRA GHAZEE KHAN DISTRICT.

Punjab Correspondence, Vol. IV. No. 4.

THE official correspondence on this subject, dated in 1854, 1857 and 1858, is published in 1860, under the title of Memorandum on the Dehra Ghazee Khan District. This district is situated in the south-west corner of the Punjab. Its boundaries are—on the south, Kusmore; on the east, the Indus; on the west a double range of mountains, and on the north the Dehra Ismail Khan district. Its length is 206 miles, and its population, according to the last census, was 2,38,000. Dehra Ghazee Khan, the principal town, contains 16,000 inhabitants, and is in this respect the 12th city in the Punjab. Its former flourishing trade has been diverted into other channels, and it is feared that the whole town may gradually be swept into the Indus.

History.—The city was founded in the reign of Ukbar, by a faqueer called Ghazee Khan whose descendants ruled for 22 reigns. In 1767 Meer Ghulam Shah, and Serai Kullora, Raices of Hyderabad, annexed the country by placing the Goojurs in power subject to their authority. In 1774 Timour Shah Doo-ranee brought Dehra under his rule, and in 1820, Nuwab Sadiq Mahomed Khan, King of Bulawulpore, became master of the district through the aid of Runjeet Singh, to whom he paid a tribute of 5 lakhs a year. In 1830-31 General Ventura was appointed Nazim by Runjeet Singh. The first English officer appointed to the district at its annexation was General Cortlandt, who remained in charge of it till 1854.

Tribes.—The principal tribes are the Kuterans, Kusra-nees, Bosdars, the Umdanee and Nootkhance Belooches, Loonds, Khosehs, Lugharecs, Goorchanees, Dreeshuks, Muzarees and Belooches. The Kuterans are a well behaved tribe of Puthans, and quite distinct from the powerful hill tribe of the same name. The Kusranecs are about 3000 in number. The Bozdars number about 2,500, and though somewhat scattered, they are a powerful and turbulent tribe. The Umdanees and Nootkhanees are fond of living on their proprietary dues, and are very much averse to labour. The Khosehs are the worst behaved of the Belooches, with the exception of the Goorchanees. Gholam Hyder, the son of the chief was a dangerous character. He was sentenced to 7 years' imprisonment in 1857, but was released by Lieutenant Colonel Edwardes not long ago. He was disinherited by his father. The

Khoshs are about 3,000 in number. The Lughanees are subject to a chief, called Jumal Khan. The Goorchanees have of late years been very well behaved; they are however, greatly harassed by the Tisharees and other marauders. The Dreeshuks are indolent. The late chief Beejur Khan, commanded a Cavalry Levy at Asnee in 1857, against the Murrees. The tribe is unimportant. The Muzarees, from being inveterate plunderers have been transformed into peaceable orderly subjects. The Belooches possess some fine qualities; they are good soldiers, and are in many respects scrupulously honourable.

Revenue Administration.—The last revision of the settlement was made in 1853-54. The difficulties in the way of satisfactory settlement are many. The land suffers very much from alternations of drought and overflowing. Remissions of the revenue were granted, where necessary, in 1854 by Sir John Lawrence. The district in which the people were most discontented was Mithunkote. The Belooches are not fond of cultivation. The country requires both population and irrigation before the wastes can be cultivated. It is evident that cultivation has decreased in Dehra Ghazee Khan during the last few years. The assessments for 1853-54 amounted to Rs. 4,55,504; the subsequent reductions are estimated at Rs. 96,685, or upwards of 20 per cent. In the southern part the assessment is light. The chief Commissioner considers, that 8 annas per beegah watered by the hill streams, and 12 annas for those flooded from the Indus, is a fair rate. The inundations from the Indus are very uncertain in their operations. The water sometimes lies on the surface of the land, leaving a fertilizing deposit, and sometimes rushes over the soil, in such a way as to injure it. A money assessment is perfectly bearable if the arrangements of the officers are carefully made.

Crimes.—The appendix contains a table showing the decrease of crimes since 1854. The number of murders were chiefly caused by jealousy. The cases of cattle stealing were 184 in number. The total number of crimes for nine years were as follows:—

1850.	1851.	1852.	1853.	1854.	1855.	1856.
861.	957.	938	1183.	1403.	1116.	725.
		1857.	1859.			
		892.	669.			

Civil administration.—The people are not litigious. There were 2155 cases decided in 1858, the total value of which was only Rs. 75,595-3-3.

The census of the district is given thus :

NAME.	POPULATION AT LAST CENSUS.
Dehra Ghazee Khan,	1,09,026
Dajil,	33,013
Sunghur,	38,949
Mithunkote,	57,976
TOTAL,	2,38,964

The Hindoos form one-sixth of total population, a larger proportion than in the other Trans-Indus districts.

The Telegraph crosses the Indus opposite Dehra. From Dajil to Dehra there was a temporary line.

The Murrees, a Belooch tribe not mentioned in the foregoing enumeration, were subjects of the Khan of Kelat. The only formidable raids perpetrated by them was in August 1857. Shortly after this the Khan of Kelat was induced to move against the tribe, and his expedition, under the management of Major Henry Green, Sind Irregular Horse, was decidedly successful. North of the Murrees are found the hill Kuteerans, a powerful tribe, numbering from 5 to 6,000 souls, of whom 2,000 to 2500 are fighting men. They cultivate cotton and indigo, and sell two or three maunds of wheat for the rupee. They cultivate well and do not plunder; their habit of receiving and selling stolen goods has been put down by energetic measures.

Foray on the town of Dehra Futteh Khan by the Kusranee tribe.—A letter dated 25th March 1852 from Major Nicholson, Deputy Commissioner to Major Ross, Leia Division, contains details of this foray. Manuk Mull, a Government watcher over the cotton crop of Yusuf Khan Kusranee, suddenly disappeared, and Yusuf was suspected of having made away with him. The Thanadar of Gerang was ordered to seize him, but not being able to find him he seized and imprisoned his brother Mahomed instead. Mahomed in attempting to escape from the jail met with injuries which resulted in his death. Yusuf buried the body and repaired to his tribe in the hills with the

view of raising them against Government. On the 17th March 1852, 300 Kusranee foot and 40 horse appeared before Derah Futteh Khan, and meeting with little opposition they plundered the place and retreated. They were pursued by the Thanadar with altogether about 60 foot and 80 horse. When the two parties met, the cavalry charged the Kusranees but were repulsed with the loss of a Jamadar and three men killed and six men wounded. The Kusranees continued their retreat to the hills without further hindrance. Another letter dated 11th February 1853 contains a further account of the Kusranees and their depredations. Appendix E contains particulars of the local products and trade of the Dehra Ghazee Khan district, which, though not thoroughly accurate, give a good idea of the nature and extent of the trade. The products include saltpetre, oil, ghee, rice, wheat, barley, joar, bajra, maize, opium, potash, dates, indigo, wool, bhung, cotton, pulsc, tobacco and goor. The saltpetre produced was estimated at 8,000 maunds, the grain at 700,000 maunds, Indigo, of an inferior kind, 2,000 maunds, varying in price from 25 to 60 Rupees. The goods received from the west, were chiefly mujeet, silk, dried fruits, &c. English Iron was procurable in the town of Dehra Ghazee Khan. The exports were inconsiderable.

IODIFEROUS SPRINGS NEAR JOWALA MOOKHEE.

Punjab Correspondence. Vol. IV. No. 5.

IN April 1855 M. Marcadieu forwards to the Chief Commissioner of the Punjab a report on the Iodiferous springs near Jowala Mookhee. The chief use to which these springs could be turned would be the cure of the Goitre in the hill regions. The manufacture of Iodine as an article of commerce is not likely to be remunerative. The springs are five in number, and are situated in the chain which borders the Jowala Mookhee valley, on its north east side, on the right bank of the Beas. They may be called, from the localities in which they are situated, Koopirah, Jowala, Jowala Mookhee, Nageah, and Cunga Basa. They are all within a few miles of each other. The geological formation of the region is thus described. "The argillaceous marls, alternating towards the superior part with a rough micaceous sand-

stone called friable, and at the inferior part with a sand-stone also micaceous, harder and smaller grained, and of a bluish color, stuck together by a calcareous cement, prevail in this formation. After this comes the same sandstone, in which are embedded a few stones of variegated grit, then micaceous sand and a scanty calcareous formation in the state of travertin; and at last, in nearing Kangra and departing from the springs, some conglomerates composed of granite, of mica schists, of quartz and of variegated sand-stone, also bound together by a calcareous cement, alternating at first with the grit, and finish in forming by themselves whole mountains, but only in the vicinity of the Kangra Nullah; a character which indicates that, when this formation took place, the periodical increase of water interrupted this deposit of sand-stone, and of argillaceous marl, in this locality only,—for as you remove from these indications of passed perturbations, the order of formation assumes its ordinary course.”

The stratification of the saliferous range, though it cannot be pronounced as discordant, presents nevertheless undulations which would testify that the matter had undergone a sort of depression when the up-heaval took place. In other respects there is great uniformity throughout the range; a fact which also applies to the springs themselves. Near the principal spring at Jowala on the eastern slope of the same hill, there is another spring, yielding very little water. The method by which the quantity of Iodine is tested, is by employing as a precipitate a solution of sulphate of copper saturated with acid sulphureous gas.

The saline springs contain, in 100 parts, the following quantities of fixed matter:—

Koopirah,	...	...	...	...	2.20
Jowala,	...	...	...	...	2.63
2nd Spring, Jowala,	...	...	...	...	2.40
Jowala Mookhee,	...	...	...	...	2.28
Nageah,	...	...	...	...	2.22
Cunga Basa,	...	...	...	...	2.32

The Koopirah spring shows itself at a short distance from the Beas. It forms a basin of about four feet in diameter, and is three feet in depth, on a level soil slightly concave round the basin. A large stream of fresh water flows close to it. The determination of the Iodine was performed on all the springs on 1000 parts of liquid; consequently for this spring, it is the equivalent of 22 parts of salt. Now, 1000 parts of water contain Iodine, 0.0799, representing Ioduret of Potassium, 0.1052, or for 1000 parts of salt from the evaporation of 45.454 of

water, furnishes Iodine, 3·6318, representing Ioduret of Potassium, 4·7818.

The Jowala spring is a stream running from the westerly slope of an ellipsoid shaped hill situated at the foot of the principal chain of which it forms part. Its summit is 2,760 feet above sea level; the spot where the spring issues, 1403; and the foot of it where the valley begins, 1109. The question to be ascertained was whether the stream could be increased in volume. Before the necessary works were begun it yielded 25 pints of water in 20 minutes or 75 pints per hour, or 1800 per 24 hours. After the works were completed it was found to yield 25 pints per 5 minutes = 300 per hour = 7200 per 24 hours; 1000 parts of water represent 26·30 of fixed saline matter, containing Iodine 0·09324 representing Ioduret of Potassium 0·12273, and 1000 parts of salt from 38,000 parts of liquid yield Iodine 3·5452, representing Ioduret of Potassium 4·6665.

The 2nd spring of Jowala oozes, and its volume has not been determined. 1000 parts of water from this spring represent 24 of salt, containing Iodine 0·0799 or Ioduret of Potassium 0·1052, or per 1000 parts of salt from 41,666 parts of liquid, Iodine 3·4958, representing Ioduret of Potassium 4·3833.

The Jowala Mookhee spring issues from a hole made by the natives in the hard grit, it does not appear very abundant because its issue is evidently impeded by the surrounding rocks, which prevent one from ascertaining the real volume of its water in a given time. 1000 parts of this water yield 22·80 of salt, containing Iodine, 0·0799, representing Ioduret of Potassium, 0·1052. And 1000 parts of salt from 43,860 of water, contain Iodine, 3·5040, representing Ioduret of Potassium, 4·6140.

The Nageah spring belongs to the same category as that of Jowala Mookhee, and is similarly surrounded by rocks. 1000 parts of water yield 22·20 of saline matter, containing Iodine, 0·09324, representing Ioduret of Potassium, 0·12273. And 100 parts of salt from 45,045 of water, Iodine, 4·2000, representing Ioduret of Potassium, 5·5282.

The Cunga Basa spring issues from the centre of a hill which borders the Kangra torrent. Its elevation is 660 feet; and its temperature is 76° Faht., that of the air being 52° Faht. 1000 parts of this water yield 23 of salt, containing Iodine 0·09324, representing Ioduret of Potassium, 0·12273. 1000 parts of salt from evaporation to sixty of 43,478 parts of water contain Iodine 4·0539, representing Ioduret of Potassium, 5·3360.

The water from these five springs, after being slightly concentrated, was purchased by the Bunniahs at one anna per seer

or exchanged for the same value in ottah. The salt is believed to promote the cure of Goitre.

The similarity of the iodurated produce of these springs is so great that their origin is probably the same. The exact nature of the salt in the ground can only be learnt by a skilful miner. The results of the Jowala spring in Troy weight are,

	lb.	oz.	gr.
Salt,	282	0	0
Iodine,	1	0	0
Representing Ioduret of Potassium,	1	3	3·85

In Europe Iodine is extracted from sea-weed which yields about 1-1000th per 1000 parts; the produce of these Himalayan springs is three and a half times this. Twenty to thirty grains under different forms are sufficient to cure Goitre. The value of the Iodine lost in these springs every day is 24 Rupees, according to European prices, and is in reality much more in this country.

THE JIVAH MINERAL THERMAL SPRING.

Punjab Correspondence. Vol. IV. No. 5.

IN September 1855 Mr. Marcadieu continues the report on this subject which he submitted in January 1854.

The Jivah spring is in many respects similar to that of Bourbonnes-les-bains. It was necessary to determine whether Bromine was present in the waters of the Jivah spring. There are 7 or 8 different processes to ascertain this question; and Mr. Marcadieu thinks they are nearly all of equal value and may be adopted with equal security. The method pursued by him, he describes as follows:—"I have endeavoured, in my researches, to establish, first, the presence of Bromine in 40 parts of mother water, resulting from 40,000 parts of liquid and afterwards in a second experiment on the same portion of mother water, resulting from 40,000 parts of saline water, I determined its weight. In the first case the following process served to detect the presence of the Bromine. A clear glass tube of $1\frac{1}{2}$ feet in length, was cut into three equal parts, one end of each was closed by the flame of a lamp used for such purposes. I added in the first tube a solution of Chlorine recently prepared, and then a small quantity of Ether. After having put equal portions of the mother water, previously rendered colorless, in the second and third tubes, I added a few drops of Ether to the liquid in the second tube,—and

in the third tube a solution of Chlorine. The three tubes were well shaken, and placed side by side on a white sheet of paper. No. 1 tube proved that the Ether was not sensibly colored by contact with the Chlorine solution; No. 2 tube, that the Ether was not colored by the contact of the *essay liquor*; and No. 3, in which the saline solution was in contact both with the Chlorine and Ether, served to detect the presence of Bromine, becoming instantly of a yellow reddish color, attributable to the solution of Bromine in the liquid; its color presenting a striking contrast with the Ether of the other two tubes."

The results of his experiments to ascertain the weight of the Bromine were as follows;—

In 40,000 parts of saline water,

Bromide of sodium, 0·48.

Or from 1000 parts of saline water,

Bromide of sodium, 0·012.

Iodine could not be detected. It is found in all organic substances from the sea, but has not hitherto been discovered in sea-water itself. Jivah is situated at an elevation of 4,433 feet above sea level, and is a delightful and salubrious spot. The presence of Bromine in its mineral springs renders them highly valuable in a medicinal point of view.

LITHOGRAPHIC PRESSES IN THE PUNJAB JAILS.

Punjab Correspondence. -Vol. IV. No. 5.

IN October 1855 G. C. Barnes, Esq., Sessions Judge, Cis-Sutlej States, submits the reports of the Deputy Commissioners of Umballah and Ferozepore on the working of their Lithographic Jail presses. These presses were commenced in 1854. It was originally intended to have only one press in each division, but sanction was eventually given to establish one at each of the large stations of Umballah and Ferozepore.

Umballah.—The printing establishment at this jail was supplied with three presses, which however were never worked together. They were manufactured at Delhi and cost from 70 to 80 Rs. each. The expenditure for 9½ months including original cost for presses &c. was Rs. 2176-6-10. The income actually realized was Rs. 1749-6-6. The accounts were not yet adjusted, but if the value of stock and of saleable printed forms and paper to be included, there would be a balance in favour of the press. The work performed was chiefly the printing of

forms. Altogether 132 reams of paper were printed, 45 in English and 87 in Oordoo and Nagree. The total number of English forms printed was 41,086, of vernacular 1,47,434. In this enumeration books and pictures were entered as "forms." The charges for printing* were about 25 per cent. below the *Delhi Gazette Press* and nearly 40 per cent. below the *Lahore Chronicle Press*. An effort was likewise made to promote education among the natives by printing cheap and useful books and maps. These maps contained particulars of village boundaries, area, jumma, population, &c., and were eagerly bought up.

Ferozepore.—The press at the jail commenced work in March 1855, and from the requisitions already made and in prospect, full employment was expected. The establishment was kept up at the trifling cost of 26 Rupees per month paid for a printer and a writer; the rest of the work was performed by convicts. The expenditure from 19th March to the end of September 1855 was Rs. 1240-5-11, the income shews a deficiency of Rs. 528. The total number of forms and statements printed in English was 11,104, and in vernacular 55,977. The prices charged were lower than those of the Lahore and Mooltan presses. The paper used for printing amounted to 259 reams. The work consisted chiefly of statements for the districts of Loodianah, Googaira, and Ferozepore. A paper manufactory was established in connection with this press, from which great advantages were anticipated.

CRIMINAL CLASSES OF THE PUNJAB.

Punjab Correspondence. Vol. IV. No. 5.

THE correspondence on the subject of wandering and predatory tribes in the Cis-Sutlej States is dated in 1855 and 1856. A memorandum by G. Campbell, Esq., Officiating Commissioner and Superintendent, contains a general view of the subject. The four districts from which particulars were received, were Umballah, Thanesur, Loodianah and Ferozepore.

On the 14th of April 1856 there were in the district of Umballah 12 Bouriahs, 180 Sansees and 7 Gundeelas. A nominal roll of these Bouriahs &c. including women and children, showed 841 individuals altogether. On the 20th November the Officiating Deputy Commissioner reports that the number of the Bouriahs had increased by 6. Of the total number of this

tribe 15 had taken to the plough and 98 had entered into service, thus reducing the number of beggars and vagrants by 113. The district of Thanosur contained in September 1856, about 700 Sansees including women, and only 5 Bouriahs and a few of their women. The precautionary measures adopted had a beneficial effect. In this district however there was another troublesome tribe, the Beloches, bolder and more dangerous than the Sansees. There were on the 14th October about 218 of the Beloches present, while of the 40 absent many had taken their families with them and were not likely to return. In the Loodianah district there were in August, 295 Bouriahs, 640 Harnees and 273 Sansees. They were in the habit of attending marriages for the purpose of thieving. The Bouriahs were good cattle-trackers, and probably expert cattle-lifters. On the 30th October the numbers were reported to be 439 Bouriahs, 723 Harnees, and 253 Sansees. In this district as elsewhere absentees were punished. In the space of $2\frac{1}{2}$ months 67 absentees were brought to notice and 23 of them were traced and punished, which was considered as an evidence of vigilance on the part of the Police, &c.

In May 1856 there were in Ferozepore 4,284 Bouriahs including women and children. During the period of five years 153 of this tribe were apprehended on various charges, of whom 105 were convicted. In September 1856, after the introduction of the prescribed precautionary measures crimes were less frequent. A further report contains the following figures, Bouriahs 1033, Sansees 13, Chungars 14, Harnees 12. Simla at that period contained no Bouriahs or others whatever.

EPIDEMIC CHOLERA IN THE PUNJAB IN 1856.

Punjab Correspondence. Vol. IV. No. 5.

THE Report on the Epidemic Cholera which appeared in the central and district Jails, Anarkullee and the city of Lahore during the months of August and September 1856, was drawn up by Dr. C. M. Smith, Civil Surgeon, Lahore.

The Epidemic commenced in Gwalior, and after visiting Agra, Delhi, Meerut, and Kurnaul made its first appearance in the Cantonments of Meeran Meer, on the afternoon of the 6th of August, 1856. It was feared that the Central Jail might be ravaged by the disease and precautionary measures were accordingly taken. The number of prisoners at the time was 1687.

On the 16th of August, however, the disease broke out and lasted exactly one month, during which time 367 prisoners were attacked of whom 183 died. On the 3rd September, the healthy prisoners to the number of 999 were removed into a camp pitched upon a high and dry piece of ground upon the Ferozepore road. No attempt at escape or emeute was even thought of, and all the prisoners were sent back to the jail when the disease had disappeared. The number of cases in the camp was only 32, of which 17 ended fatally. The shortest duration of the disease in fatal cases was 5 hours, the longest, on the 28th day. On this point Dr. Smith says :—" It shews the great severity of the epidemic, that out of 200 fatal cases, 136 occurred in the 1st stage, or within 24 hours of the attack, the most quickly fatal cases taking place in 5 hours, a large proportion dying in 11 hours, but the greatest number sank between the 15th and 24th hour ; those who died after the 7th day, expired either from the effects of gastro-enteric irritation, or fever of an adynamic type, consequent on the attack of cholera ; all choleraic symptoms had of course been subdued." And regarding the nature of cholera he remarks, " the greatest amount of evidence we possess points to the malarious nature of the disease ; nearly all epidemics of cholera have appeared during or immediately after heavy rain. August and September appear the months most obnoxious to the disease in India ; the present epidemic is a striking instance of this in all respects, more rain having fallen in the Punjab this season than has been known for many years, in fact the country was inundated with water."

In the district jail the first case occurred on the 19th of August, and the disease disappeared on the 7th of September. During this period the total number of cases was 83, of which 44 were fatal. The jail contained 703 prisoners when the disease broke out, and as this number was more than the building could conveniently accommodate, 180 men were removed to Lena Singh's Chownee, and some short termed prisoners were released thus bringing the number below 500. It is mentioned as a remarkable fact that not a single case of cholera occurred among the police guard employed in either jail or in camp.

At the Civil station of Anarkullee 12 cases occurred among the European population of which 7 proved fatal. Surrounded as this place was by infected localities, and considering the amount of the European population, it must be regarded as having escaped remarkably.

In the city of Lahore cholera broke out about the 15th of August. There was a remarkable preponderance in the mortality of Mussulmans over the Hindoos. In the cantonments of

Meean Meer the numbers were nearly equal being 141 Mahomedans and 162 Hindoos. The villages of Muzung, Baghbanpore, Echhra and Kote Kunagree were infected, but particulars could not be obtained.

DANVERS' REPORT ON RAILWAYS IN INDIA.

Parliamentary Papers.

On the 12th March 1860 .Mr. J. Danvers submits to the Secretary of State for India, a report on the subject of Railways in India, to the end of the year 1859. This being the first annual report of the kind it is accompanied by a general review of the history of Indian Railways, and by an account of the system on which they were introduced.

In 1845 two private associations were formed under the designation of the "East Indian" and the "Great Indian Peninsula" Railway Companies. It was found that their objects could not be carried out, without the aid of Government. The late East India Company ultimately granted that aid, by guaranteeing the interest on the Railway capital; and it is on this "guarantee system" that all the Indian Railways are being constructed. The principal conditions of the deed of contract are the following. "The guarantee, which is for a term of 99 years applies to all monies paid into the Government Treasury, and expended with the approval and sanction of the Government. When the capital account which consists of expenditure so sanctioned is closed, such portion of the subscribed capital as shall not have been required for the purposes of the undertakings, is to be returned to the Companies." The Railway Companies have the power of surrendering the works, at any time after any portion of the line has been opened for a period of three months, upon giving six months' notice to the Government, who would have to repay the whole amount that has been expended, with their sanction, on the undertaking. Government has the power, within six months after the expiration of twenty-five or fifty years respectively from the date of the contracts, of purchasing the Railway at the mean market value in London of the shares during the three previous years. Government is entitled, in the event of the Railway Companies failing to complete the railroads, or to work

them satisfactorily, to take possession of them, repaying, within six months, the sums which have been properly expended. At the expiration of 99 years the land reverts to Government, and, if the Railway Companies have not availed themselves of the power of surrendering before that period arrives, the works also lapse to the Government, who would have to purchase the stock of engines, carriages, &c., at a valuation.

The Government exercise their supervision of the Railways both at home and in India—at home by an official director who attends each board of the Companies in London, and in India principally through officers specially appointed for the purpose. With regard to the regulation of fares, they are, in the first instance, fixed with the approval of Government, and alterations in them can only be made by the Railway Companies with the concurrence of the same authority. In the event of the profits exceeding ten per cent., the Government can order a reduction in the rates, but not to such an extent as to bring the net receipts below ten per cent. upon the capital expended.

The Railway Companies are also bound, under the contracts, to convey the Mails and Post Office servants free of charge; to take Military Officers in first class carriages at second class fares and soldiers when on duty in second class carriages at the lowest fares; also horses, guns, waggons, and military stores, &c., at the lowest rate for the time being chargeable for the carriage of such animals, goods, &c. A Committee of the House of Commons was appointed in 1858 to inquire into the causes of the delay in the Railway works. They classified the causes of delay under four distinct heads, namely,—

1st. Those arising from Government supervision at home and in India.

2d. Those incidental to the execution of extensive and complicated public works, under such circumstances, in a distant country.

3d. Those produced by political causes, such as insurrection and mutiny.

4th. Those arising from the natural difficulties which the face of the country presents.

The Committee adduced sufficient reasons to account for the delay, and were of opinion that the progress of railroads in India would bear comparison with that of English lines.

The course Mr. Danvers adopts in his report is,—

1stly. To describe each undertaking and its objects separately;

2ndly. To exhibit the results of the traffic on those sections which have been worked;

3rdly. To show the financial position of the Railway Companies and the Government in respect to them; and,

4thly. To take a general view of the prospects of these undertakings.

I. RAILWAYS.

East Indian Railway.—This line runs from Calcutta to Delhi, with branches to Rancegunge, the Barrakur river, and the Singarrow Valley, and a line from Allahabad to Jubbulpore, where it joins the trans-peninsula line from Bombay. Its whole length is 1338 miles to Delhi, including branches and about 200 miles for the Jubbulpore line. At Allahabad where the Ganges and Jumna join, the line crosses the latter river by a splendid bridge of 15 spans of 200 feet each. The bridge over the Soane consists of 28 spans of 150 feet each; that over Adjai of 32 spans of 50 feet each, and those over the Keeul, Hullohur, and Tonse of 9, 4, and 7 spans respectively of 150 feet each. The only tunnel is near Monghyr, and is 900 feet long. The first operations of the East Indian Railway Company were confined to the line between Calcutta and Rancegunge a distance of 121 miles. The Company was incorporated in 1849, commenced actual operations in 1851, and in February 1855, the line to Rancegunge was completed.

A return of the persons employed on the completed sections of the line in Bengal only, showed that there were on the 1st of October 1859, 3051 in all, of whom 261 were Europeans and 2790 were natives. The cost of the finished portions of the line was about £3,700,500, viz. :—

Bengal portion	...	£2,314,500
North West portion	...	1,386,000

The estimated capital for the whole undertaking is £19,000,000, but authority was only given for raising £14,000,000 in the mean time. The effects of the mutiny will have added £3,000,000 to the total cost of the Railway. The number of shareholders on 31st December was 5857. The amount of tonnage engaged for the conveyance of Railway material from England to India was, as follows :—

1850 to 1854	...	Tons.	40,000
1855	...	...	58,000
1856	...	...	65,000
1857	...	...	48,000
1858	...	...	35,126
1859	...	...	32,094

Total ... 278,220

The existing fares are,

For passengers, 1st Class, $1\frac{1}{2}$ annas per mile.
 2nd „ 9 pies „
 3rd „ 3 pies „

Goods are divided into five classes and conveyed at $\frac{1}{3}$ of a pie to 2 pies per maund per mile.

The amount paid by Government on account of guaranteed interest, from 1849-50 to 1858-59 was £1,528,045-18-4.

The net profits paid by the Railway Company up to 30th June 1859, were £325,405-3-4.

Great Indian Peninsula Railway.—This Railway commences in the island of Bombay, and after reaching the town of Callian, 33 miles distant, it branches off along the valley of the Nerbudda to Jubbulpore in a North Easterly direction, and by Poona, and Sholapore towards Madras in a South Easterly direction. There are also branches to Nagpore, and to Campoolie. The length of these lines, is as follows :—

34 $\frac{1}{4}$	miles from Bombay to Callian, and branch to Mahim.
572 $\frac{1}{4}$	„ Callian to Jubbulpore.
389	„ Callian to junction with Madras line.
263	„ Nagpore Branch.
7 $\frac{1}{2}$	„ Campoolie Branch.

The objects of this undertaking are to assist in establishing a permanent and speedy means of communication, for political and commercial purposes, between the three Presidency towns, and to connect the great cotton growing districts of Central India with the seaport of Bombay.

In 1849 the contract was entered into for the construction of the line from Bombay to Callian, and in 1854 the whole of the lines were undertaken, at a guaranteed interest of $4\frac{1}{2}$ per cent. which has been increased to five per cent. whenever shares have been issued. The greatest physical difficulties on the line are the mountains which separate Bombay from the Deccan. The North East line of Railway crosses the Thull Ghat at an elevation of 1,912 feet; the South East line crosses the Bhore Ghat at an elevation of 2037 feet. The bridges of this line possess the advantage of resting on good rock foundations. On the 31st December 1859, 245 $\frac{1}{2}$ miles were open for traffic. The number of persons employed on the open portion of the line on the 1st October was 2,598, of whom 255 were Europeans and 2,343 natives. The deaths per annum of Europeans were 2·72 per cent. The total cost of the undertaking is estimated at £12,000,000, and the number of shareholders on 31st December was 3,860.

The amount of tonnage engaged by the Company was as follows:—

1850	Tons. 927	1855	Tons. 12,870
1851	6,584	1856	26,668
1852	4,925	1857	33,117
1853	6,132	1858	63,032
1854	3,850	1859	50,228

The existing fares are, for passengers,

1st class, $1\frac{1}{2}$ annas per mile:

2nd „ 6 pies „ „

3rd „ 3 pies „ „

Goods are conveyed for 10, 14, 18, 22 and 30 pies per ton per mile for the respective classes. The amount paid by the Company in liquidation of the Government guarantee up to 31st December last, was £181,698-7-9. The amount of guaranteed interest received by the Company on capital, was £644,904.

The Madras Railway commences at Madras, and at Arcunum it divides into two lines, one running South West to Beypore, and the other North West to join the Bombay line. Branches strike off from the South Western line to Bangalore, and to the foot of the Neilgherries. The length of the various lines is 850 miles. The Company was established in 1852 and incorporated in 1853. The section from Madras to Arcot was opened in 1856. That from Arcot to Vellore in 1857 and that from Vellore to Goriatum in 1858, making an entire distance of 96 miles open in 1859. The line to Beypore is comparatively free from difficulties, but that to the North West towards Bombay is intersected by twelve rivers, requiring upwards of three miles of bridging, and is crossed by two ranges of hills. The number of individuals employed on the open section on 1st October was 2796, of whom 74 were Europeans, 147 East Indians, and 2575 natives. The deaths of Europeans were 1.33 per cent. The estimated amount of capital is £8,500,000, and the number of shareholders on 31st December 2056. The tonnage engaged was as follows:—

1853	1415 Tons.	1856	23,727 Tons.
1854	13,367 „	1857	5,877 „
1855	40,772 „	1858	13,987 „
	1859		37,407 Tons.

The amount paid by Government for guaranteed interest was £391,735. The amount paid by the railway in liquidation up to 30th June 1859, amounted, in round numbers to £46,500.

The rates and fares are, for passengers,

1st class 1 anna per mile.

2nd „ 6 pies „ „

3rd „ 2 pies „ „

for goods 8, 10, and 12 pies for 1st, 2nd and 3rd class goods respectively, per ton per mile.

Sind Railway Company.—This Company was incorporated in 1855. By an act passed in 1857 it was authorised to construct railroads in the Punjab and to build and work steam boats and other vessels. The three enterprises, the “Sind Railway,” the “Punjab Railway” and the “Indus Steam Flotilla” are managed by the same Company.

The *Sind Railway* proceeds from Kurrachee to Kotree on the Indus, opposite to Hyderabad. Its length, including a branch to Ghizree Bunder, is 114 miles. The most important works are bridges and viaducts, of which there are several of considerable size, that over the Bahrum river being 600 yards in length; the next largest (560 yards) is that over the Mulleer. Other works of magnitude are, an embankment across a valley at Dorbejee, required to protect the line from the effects of inundation, and the wharf and steam ferry at Kotree. The difficulties in the way are, the unfavourable nature of the soil, the scarcity of water and the want of labour. The estimated amount of capital was £1,000,000, and the number of shareholders 619.

The Tonnage engaged each year was as follows:—

In	1856	...	...	...	Tons.	8,225
	1857	...	...	...		19,742
	1858	...	...	...		16,385
	1859	...	...	...		26,469
Total						70,821

The *Moultan and Umritsur* line of the *Punjab Railway* is 250 miles in length, and runs from Moultan to Lahore and Umritsur between the Ravee and the Sutlej. This course presents few obstructions to the progress of Railway works. The line was commenced in February 1859, and the section between Lahore and Umritsur will probably be opened before the close of 1860. The whole line will be finished in four years from the commencement. The estimated capital is £2,000,000, and the number of shareholders 700. The tonnage engaged was 12,298, all of which applies to the year 1859.

The *Delhi* line of the *Punjab Railway* was authorized early in 1859. Surveys have been going on but detailed plans and estimates are not yet handed in.

The *Indus Steam Flotilla* consists of 53 vessels, viz., 7 Passenger Steamers, 6 Towing Steamers, 33 Cargo Barges, and 7 Accommodation Flats. The dimensions of the passenger steamers are, length, 200 feet, breadth, 38, depth, 6, draught, 2. Of the

above named vessels, 1 Passenger Steamer, 6 Towing Steamers and 25 Cargo Barges have arrived at Kurrachee. The authorized capital is £250,000 which is held by 289 shareholders. The tonnage engaged in 1859 was 1843 tons. The following is a statement of the trade of Sind. The increase manifested is favourable to the prospects of the railways and flotilla.

Year.	Imports.	Exports.	Total.
	£	£	£
1848-49	344,715	107,133	451,849
1849-50	419,352	114,378	533,731
1850-51	425,831	196,461	622,293
1851-52	489,220	244,122	733,343
1852-53	535,690	376,337	800,000
1853-54	508,793	376,310	885,103
1854-55	575,196	346,893	922,089
1855-56	629,813	604,440	1,234,253
1856-57	685,665	734,522	1,420,187
1857-58	1,081,100	1,078,100	2,159,200
1858-59	1,540,600	1,044,200	2,584,800

Bombay, Baroda and Central India Railway.—This line commencing in Bombay proceeds in a northerly direction through Surat, Broach, and Baroda to Ahmedabad, an entire distance of 309½ miles. The object of the line is to connect Bombay with the cotton districts of Guzerat. The Company was incorporated in 1855, and the first sod was cut in May 1856. The section between Surat and Broach, &c. was sanctioned in 1855; that between Surat and Bombay not till April 1858. The country through which the railway passes is low and flat, and the greatest engineering difficulties to be provided for are rivers and occasional inundations. The bridge work amounts to nearly 6 miles. The bridge over the Taptee is 2003 feet in length, and will have 32 openings of 60 feet each, and that over the Nerbudda is 3750 feet in length, and will have 60 openings of 60 feet each. The estimate capital is £2,500,000, or about £7,400 per mile, and the number of shareholders in December was 906. The tonnage engaged was as follows :—

In 1856	Tons.	3,215
1857		16,367
1858		19,313
1859		31,075

Total	...			69,970
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Eastern Bengal Railway.—This Company was formed in 1857, incorporated the same year, and commenced actual operations in April 1859. The line is to run from Calcutta to Koosh-tee on the Ganges opposite Pubnah, and will be eventually carried to Serajgunge and Dacca. The country traversed is rich in agricultural produce and contains upwards of 500 inhabitants to the square mile. The capital was originally estimated at £1,000,000, which was held by 144 shareholders. The freight engaged by the contractors up to 31st December was 12,569 tons. This line may not be confined to the above operations but may be extended to Darjeeling.

Great Southern of India Railway.—This Company was constituted in 1857 and incorporated in 1858. The lines included in the undertaking are from Negapatam to Trichinopoly, with extensions north to a point on the Madras Railway (probably in the neighbourhood of Errode) and South to Madura and Tuticorin. The first named only has been sanctioned. The length of line is about 80 miles and the estimated Capital £500,000. No physical difficulties occur, good ballast is plentiful, and the country traversed is highly productive. The works were commenced in 1859, and are expected to be completed in the summer of 1861. The number of shareholders is 170.

Calcutta and South Eastern Railway.—This Company was incorporated in 1857, and entered into a contract with the Secretary of State in Council in March 1859. The object of the line is to connect Calcutta with the Mutlah in order to provide increased facilities for the ships trading to Calcutta. The line is about 29 miles in length, and presents no physical difficulties. The estimated capital is £250,000, and the number of shareholders in December was 342.

These are all the lines which have been undertaken by Companies. In addition to these, proposals have been made by two Companies in for establishing railway communication in Oudh and Rohilcund. A line has also been projected from the Kumaon Iron Works to a point in the East Indian Railway or in a new line of railway in Rohilcund. This line is to be formed by Government, without the intervention of any Company.

The following statement shows when each Company was formed, the capital, the amount authorized, the amount raised, and the rate of guarantee.

Railway Company.	When established, & Date of Incorporation.		Capital estimated for each taking.	Amount authorized to be raised.		Amount raised in England to 31st December 1859.		Amount raised in India up to latest Advances.	Total raised at the end of the Year 1859.	Rate of Guarantee.
				By Share Capital.	By Debentures.	Total.	By Share Capital.	By Debentures.		
	1845.	1849.	£	£	£	£	£	£	£	
EAST INDIAN Main Line	1st June	1st Aug.	19,000,000	9,255,000	2,745,000	12,000,000	8,970,344	2,745,000	11,851,255	5 per cent. at 5 p. cent.
Jubbulpore	"	"	"	2,000,000	"	2,000,000	1,757,310	"	1,750,002	
MADRAS Main Line	1852.	1853.	"	"	"	"	"	"	"	
	26th July	14th Jan.	8,500,000	3,000,000	1,000,000	4,000,000	2,984,577	347,900	3,332,577	5 per cent. at 5 p. cent.
Bellary	"	"	"	1,000,000	"	1,000,000	565,850	"	565,850	
Great Indian Peninsula	1849.	1849.	12,000,000	8,000,000	333,300	8,333,300	4,964,744	333,300	5,611,634	
Sind	1st Aug.	1st Aug.	"	"	"	"	"	"	"	5 per cent.
Punjab	1855.	1855.	1,400,000	1,000,000	"	1,000,000	894,340	"	914,787	
Indus Steam Navigation	12th Jan 1857.	2nd July 1857.	4,000,000	1,500,000	"	1,500,000	566,945	"	506,945	
Bombay, Baroda, & Central India	"	"	280,000	250,000	"	250,000	249,140	"	249,140	5 per cent.
Eastern Bengal	"	"	2,500,000	2,000,000	310,000	2,310,000	1,379,228	106,635	1,503,965	
Calcutta and South Eastern	1856.	1st Aug.	22,500,000	1,000,000	"	1,000,000	424,773	"	427,458	
Great Southern of India	"	"	250,000	250,000	"	250,000	128,505	"	129,270	5 per cent.
	1857.	2nd Aug.	2,000,000	500,000	"	500,000	195,000	"	196,244	
Total			£ 52,430,000	29,755,000	4,378,300	34,133,300	22,990,846	3,532,895	625,971	27,079,712

* Including the Jubbulpore Line. † Including the contemplated Line from Delhi to Lahore. ‡ Including proposed extensions.

The proportion of capital subscribed in India, to that subscribed in England is as £1 to £43. Out of every million of railway money, about £976,500 is raised in England, of which about £555,000 is expended there. The balance of £426,500 is required to meet the expenditure in India, in addition to the amount subscribed in India.

The eight Railway Companies received altogether up to 31st December 1859, the sum of £3,840,790 for guaranteed interest. The three Companies, who have commenced working operations received £3,508,535 of this sum, and on the 30th June 1859 they had repaid £562,633. These eight Companies are employed to open 4,917 miles of communication, exclusive of the navigation of the Indus from Kotree to Moulton, a distance of 570 miles. Exclusive of the Calcutta and South Eastern, each Railway Company undertakes an average length of line of 700 miles with a capital of £7,454,000. The following table shews the fluctuations in the prices of Indian and Railway securities for five years :—

Name.	Amount of Shares.	1855.			1856.			1857.			1858.			1859.		
		Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
East Indian ...	20	26	21	23½	24½	21	22½	£100 Stock. 115	97	106	113	102	107½	109	93	101
Madras 4½ per cent. ...	20	21½	18½	20	21½	18½	20	20½	17	18½	20½	17½	18½	95	82	88½
Madras 5 "	20	...	...	...	...	...	...	22½	19	20½	22½	19	20½	102	92	97
Great Indian Penin- sula ...	20	26½	25	25½	23½	20½	21½	22½	19	20½	22½	20½	21½	107	90	98½
Sind ...	20	...	...	...	...	...	...	22½	...	...	22½	21	21½	22½	17	19½
Consols ...	100	93	88	90½	95½	92½	93½	94½	86½	88	98½	86½	92½	98½	88½	93½
Indian Loan ...	100	...	...	...	...	...	...	...	...	...	99½	97½	98½	106½	97	101½

The average weight of materials for a mile of railway is 250 tons, or 1,210,000 tons for the lines already sanctioned. This gives some idea of the amount of freight required for the conveyance of railway stores to India. Up to 1859, 794,904 tons of the above quantity had been shipped.

The number of railway accidents in 1857 and 1858 may be thus summarised :—

	East Indian.		G. I. Peninsula.		Madras.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1857	10	1	5	2	2	
1858	25	15	8	14	2	

This includes passengers, persons connected with the lines, and persons unconnected. In 1857, 1,931,892 persons of all classes travelled by Railway, and of these only one was killed. In 1858 out of 2,423,508 passengers only 2 were killed. The average rate of mortality among the Europeans in the service of the various Companies was only 2·9 per cent. The mortality in the Indian Army, exclusive of casualties from war is about 6 per cent.

II.—TRAFFIC OPERATIONS.

At the end of the year 1859 the whole extent of railway communication open in India, was 636 miles. The length the following statistics of traffic apply to is only 436 miles, no returns having been received of the results of the remaining 200 miles. Details of the traffic of each of the three lines in operation are contained in the report, but the following tables will shew the general results of the three railways combined :—

Year ending 30th June.	No. of Miles.	Railway.	No. of Passengers.			Tonnage of Goods.	Receipts from Passengers.	Receipts from Goods.	Total Receipts.	Working Expenses.	Net Profits.*
			1st Class.	2d • Class.	3d Class.						
1853-54	35	Great Indian Peninsula ...	11,750	62,217	461,198	28	13,647	604	14,251	7,139	7,122
		East Indian 121									
1854-55	156	Great Indian Peninsula 35	15,476	78,708	777,390	33,603	30,009	10,015	46,024	31,876	14,148
		East Indian 121									
1855-56	209	Great Indian Peninsula 88	15,918	86,153	1,242,801	133,107	58,504	47,118	105,622	45,795	59,827
		East Indian 121									
1856-57	274	Great Indian Peninsula 88	23,001	91,088	1,710,747	250,792	92,723	105,154	197,877	81,596	116,281
		Madras ... 63									
		East Indian 121									
1857-58	332	Great Indian Peninsula 130	27,400	90,918	2,612,431	329,063	111,131	150,615	261,746	111,444	150,302
		Madras ... 81									
		East Indian 142									
1858-59†	432	Great Indian Peninsula 194	28,973	176,826	2,516,583	195,431	157,431	224,994	402,025	187,065	214,960
		Madras ... 96									

* It is possible that these amounts may be slightly altered hereafter, as there are certain charges about which there is some doubt as to whether they should be applied to capital or revenue.

† A further section of 35 miles was opened on the Great Indian Peninsula line just before the end of the year.

The numbers of passengers per mile in each year were,—

Year ending 30th June.	On the East Indian.	On the Great In- dian Peninsula.	On the Mad- ras.	Average on the Three Lines.
1854	...	15,291	...	15,291
1855	2,983	13,936	...	5,440
1856	6,933	5,761	...	6,440
1857	8,377	7,353	2,523	6,659
1858	9,120	6,306	2,559	6,418
1859	9,661	5,987	3,009	6,533

The proportion per cent. of passengers in each class was.—

Year ending 30th June.	1st Class.	2nd Class.	3d Class.
1857	1·3	4·9	93·8
1858	1·3	4·3	94·4
1859	1·2	6·2	92·6

III.—FINANCIAL POSITION.

The total receipts, working expenses and profits of the three Railways for 6 years, were as follows :—

Year ending 30th June.	Total Re- ceipts.	Working Ex- penses.	Profits.
1853-54	£14,251	7,129	7,122
1854-55	46,024	31,176	14,148
1855-56	105,622	45,795	59,827
1856-57	197,877	81,596	116,281
1857-58	261,746	111,444	150,302
1858-59	402,025	187,065	214,960

The net profits of the three Railways, notwithstanding the small earnings of the Madras line, amounted to more than the

guaranteed interest so that the Government was practically relieved from any payment on this account.

IV.—PROSPECTS.

At present the conveyance of merchandize is very limited, but progress is manifest, and the receipts from goods are already greater than those from passengers. The proportion in 1856 was 55·40 of the latter to 45·60 of the former; in 1859 it was 39 to 61 per cent. No expense attending the purchase of land falls upon the Indian railway shareholder, Parliamentary contests are avoided, and law expenses are consequently much below those paid by English Companies. For instance the South-Eastern Railway in England paid 4·669 per cent. on its capital for Law and Parliamentary expenses, whereas the Madras Railway paid only ·01 per cent. These are perhaps the highest and the lowest cases respectively. The average cost of Indian Railways bears a favourable comparison with that of other countries. The expense of maintaining Railway lines in an efficient state in India has not hitherto been greater than that incurred in other countries; but the full effects of the Indian climate, &c. on the wood work has not been ascertained. The chief trade which the Railway system will develop is that in Cotton. During the ten years ending 1858, India supplied the United Kingdom with an average quantity of 146 millions of pounds per annum or about 18 per cent. of the total quantity imported, America supplying 75½ per cent. of the remainder. Of the Indian portion Bombay sent 135 million pounds, Madras 9½ and Bengal 1½ millions. The operation of railways in Bombay will enable producers to deliver cotton at Bombay one penny a pound cheaper than they could otherwise do.

The appendix contains the form of the deed of contract, between the Government of India and the various Railway Companies, and Tariff and other tables.

MUNICIPAL CONSERVANCY IN THE MOFUSSIL.

Bombay Records, No. XXVII. New Series.

Appendix C. (revised.)

THE Pamphlet bearing this title consists of a number of tables, with particulars of the towns, villages, &c., in the Bombay Presidency, and of their inhabitants, houses, trade, manu-

factures, and Municipal Finance. Such a Memorandum was called for by Government in June 1856, but the Magistrates to whom the circulars were addressed did not furnish all the information that was required. In December 1858 they were again called upon to submit a revised statement brought up to the 1st January 1859, which should include in it all the towns and villages into which at that date Act XXVI. of 1850 had been introduced. The information which resulted from this application is embodied in a minute tabular statement which we thus epitomise:—

Collectorate.	Name of Town or Village.	Number of Inhabitants	Number of Houses.	Number of Li- quor Shops &c.	Income and Ex- penditure.	
					Receipts.	Disburse- ments.
					Rs.	Rs.
AHMEDABAD.	Ahmedabad and Suburbs, ...	120624	36,706	15	50,891	14,878
	Dholka, ...	20,408	9,142	1	4,040	2,145
	Gogo, ...	8,056	2,726	6	7,398	8,526
	Pranteej Kusba, ...	8,512	3,382	1	323	163
	Verungaum Kus- ba, ...	13,959	4,695	1	1,957	1,257
AHMEDNUG- GUR.	Nuggur, ...	28,593	4,746	14	5,069	5,700
	Cusbe Bhingar, ...	4,473	578	...	453	265
	Pett Yewla, ...	12,259	3,452	2	481	462
	Belgaum, ...	...	...	...	1,995	1,879
BELGAUM.	Chikoree, ...	...	...	...	173	155
	Gokak, ...	...	...	...	955	929
	Hookeroe, ...	...	...	...	380	195
	Moorgode, ...	...	...	...	458	143
	Nepanee, ...	...	...	...	665	499
	Sunkeshwar, ...	...	...	...	197	71
	Uthnec, ...	...	...	...	501	415
	Yeukunmurdee, ...	...	...	...	900	366
	Broach, ...	31,670	9,040	15	11,415	15,489
BROACH.	Purgunnah of Jum- booseer, ...	12,466	3,615	1	1,008	1,692
	Dharwar, ...	25,613	5,440	3	5,200	3,612
DHARWAR.	Hooblec, ...	35,278	6,152	7	11,219	10,264
	Rancebnore, ...	8,978	2,008	2	1,489	1,683
KAIRA.	Kaira, ...	12,254	4,650	3	2,924	1,635
POONA.	Poona, ...	70,425	9,719	None	18,555	17,705
	Tullegaon in the Pabul Talooka, ...	2,715	427	None	465	315
RUTNAGHER- RY.	Vingorla, ...	9,569	2,502	46	...	...

Collectorate.	Name of Town or Village.	Number of Inhabitants.	Number of Houses.	Number of Liquor Shops, &c.	Income and Expenditure.	
					Receipts.	Disbursements.
RUTNAGHERY.	Malwan, ...	12,579	2,518	19	Rs. ...	Rs. ...
	Rutnagherry, ...	10,064	1,524	22	... ..	...
	Chiploon, ...	5,199	1,097	4	... ..	...
	Hurnee, ...	7,115	1,337	9	... ..	...
	Kunkowlee, ...	1,350	294	1	... ..	...
	Sungmeshwar, ...	3,029	547	1	... ..	...
SATTARA.	...	...	...	...	...	...
SHOLAPOOR.	Sholapoor, ...	30,819	5,409	4	23,315	20,647
TANNA.	Panwell, ...	8,944	1,343	6	762	306
	Cullian, ...	6,800	1,457	3	523	506
SURAT.	Surat, ...	89,505	23,047	88	25,138	23,417
	Bulsar, ...	...	...	...	833	2,594

Note.—In the foregoing table where blanks have been left the particulars have not been ascertained or cannot be put down, pending the consideration of the rules. The revised statistics of Belgaum and Sattara were not furnished by the Magistrates. Those towns only are mentioned, from which the requisite particulars were received. Under the heading “Liquor Shops” are included distilleries and stills.

ACCOUNT OF SUMS PAID FOR THE SUPPORT OF THE RELIGIOUS INSTITUTIONS OF THE NATIVES.

Parliamentary Blue Books, No. 31 and No. 313. 1860.

ON the 5th February 1858 the House of Commons called for “an account of all sums paid to Hindoo or Mahometan Shrines, or in any way in honour or support of the Religion or Religious Institutions of the native inhabitants of India, which were collected or disbursed by the agency of the East India Company’s servants during the year 1857,” and on the 1st November 1859 the Government of India furnished the Home Government with the information supplied by the various local Governments. Besides the Rent-free lands, by which Hindoo and Mahometan shrines are extensively, if not mainly supported, the allowances or grants are as follows:—

1. Land or money endowments, or allowances in kind ad-

ministered by or under the direction of officers of Government in their capacity of local agents.

2. Grants in lieu of land or of cesses abolished.

3. Grants, whether in land or money, annexed to the Zemindars' Tahood, cash payments being made by Government.

In Bengal the amount disbursed during 1857 was Rs. 2,23,321-6-6½. In Jessore alone the sum of Rs. 1,85,634-1-9½ was expended, of which 1,78,103-9-4½ was for the Syedpore Trust estate for supporting the Emambara at Hooghly. The next important item was Rs. 6,804, for the support of the Temple of Juggurnath at Pooree. "Previous to the enactment of Act X. of 1840, the expenses of the temple, averaging about 53,000 rupees per annum, were paid by Government, who levied a tax on pilgrims, and were in possession of the former endowments of the temple, which had gradually been resumed soon after the conquest of the Province of Orissa, in 1803. By the Act in question the pilgrim tax was abolished, and the management of the affairs of the temple made over to the Rajah of Khoorda, the annual payments being continued as before. In 1843 the estate of Sataeshagaree Mehal, yielding an annual revenue of 17,420 rupees, the last remaining portion of the landed endowments at the time of the acquisition of the province, was made over to the Rajah, as superintendent of the temple, and the annual money payment was thenceforth reduced to Rs. 35,738-7-6. In 1845, on enquiry into the nature of the payments, it was found that 23,321 rupees represented partly certain assignments of revenue granted by former Rajahs of Berar, and therefore constituting an endowment, and partly certain sayer duties formerly collected on behalf of the temple, on account of which compensation was due in the same way to the other landholders of the province, while the balance was merely a donation which the Government was not bound to continue, especially as the pilgrim tax had been abolished. It was therefore decided that the annual payment should be reduced to 23,321 rupees. In 1856, owing to the neglect of the superintendent, it was found necessary for the protection of the pilgrims to appoint a police establishment, at an annual expense of 6,804 rupees, which, being deducted from the annual payment, left 16,517 rupees. From 1st September 1857 this latter amount has been commuted to a grant instead, yielding a yearly net rental of Rs. 16,827-4-10¾, the excess of Rs. 310-4-10¾ being granted in consideration of the expenses of collection and of possible losses from inundation. The amount here shown is the portion still paid on account of the police establishment. A large part of this sum, however, is to be commuted into land, the police force be-

ing reduced to a body sufficient to preserve order outside the temple, the Rajah being made responsible for the preservation of order in the interior, where the interference of the police is not to be exercised, except on the occurrence of a special emergency calling for such interference."

In the North West Provinces the only considerable item is Rs. 4,000 for the Shah Kasim Sulemanee shrine at Chunar, in Mirzapore; the rest is made up of small amounts granted to a number of places. The total amounts to Rs. 22,685-0-11.

In Madras the expenditure was as follows:—

Hindoo Pagodas, &c., ...	...	Rs. 9,06,433-13-6
Mahomedan Mosques, &c., ...	...	42,360-10 7
Total, ...	...	Rs. 9,48,791-8-1

The returns from Bombay exhibit a sum of Rs. 3,24,638-3 expended, of which the largest items are Rs. 53,821-15-6 for Poona and 48,165-15 for Sattara. Sind is left blank, and with reference to it the Commissioner says "all such State allowances were discontinued at the conquest; under the head of "Charitable Grants" in the Shikarpore Collectorate; eight small sums aggregating Rs. 199-- are returned as grants, but they hardly appear to come within the definition of the return ordered." The returns from the Punjab show that in the divisions of the Trans-Sutlej and Cis-Sutlej States, Lahore, Jhelum, Leia and Peshawur there were no cases in point. In the Mooltan division the grants are in reality personal and individual pensions. In the Delhi division there were 10 cases, for which the annual allowance of Rs. 2,522-10 was granted, but these are all believed to be in lieu of old landed grants. In the Paneeput district there are similar allowances of Rs. 1,942-8-6, and Rs. 73-10.

In Oudh the only payment was one to the high priest Moojteehud-oot-Asir and his followers who received pensions to the amount of 10,000 Rs. per annum.

In Hyderabad the returns were as follows:—

For support of Hindoo and Mahomedan shrines in

North Berar	...	...	17,122-8-3
South Berar	...	...	6,997-7-3
Dharasee District .	...	...	17,465-10-1
Raichoor Doab	...	...	37,645-12-1

Total ... Rs. 79,231-5-8

In the province of Nagpore the amount disbursed in 1857, was Rs. 33,223-3-3, of which two-thirds belong to the district of Nagpore.

In Mysore no fewer than 12,757 davasthanums and mutts were supported in whole or in part by the alienated revenues or direct disbursements of that State. The returns were as follows:—

For Hindoo Religious Institutions, &c., ...	3,65,371-12-7
For Mahomedan ditto,	11,500-5-11
Total, Rs.	3,76,872-2-6

In Pegu “ there have never been any collections or disbursements made by servants of Government for the honour or support of the religion or religious institutions of the native inhabitants.”

In the Tenasserim and Martaban Provinces “ no collections or disbursements were made in 1857 for the support or honour of any religious institution of the natives in these provinces.”

On the 7th May 1859 the Home Government forwards a despatch to the Bengal Government relating to the connection of Government with native religious endowments and the Churruck Poojah.

With reference to the former the Under-Secretary to the Government of India says, on the 15th March 1860, that immediate steps will be taken “ to introduce a Bill into the Legislative Council, which, while it repeals the Bengal Regulation XIX. of 1810, and the corresponding enactment of the Madras Code (Regulation VII. of 1817) will make provision for an appeal to the Courts of Law in cases of dispute or malversation in connection with the endowments to which those laws relate.” The Churruck Poojah forms the subject of a separate communication, and does not inter into this report.

MADRAS COURT OF SMALL CAUSES.

1859.

THE Report consists merely of statistical tables. The total number of suits instituted was 18,374, of which 3,328 were English and 15,046 native. The number of summonses issued was 41,427, and the number of second and further summonses 6,457. The Court sat 279 days during the year, and the average number of suits instituted daily was 65·856. The total amount litigated was Rs. 4,28,279-14-4, and the total amount of fees and costs Rs. 63,524-8. Out of 18,052 suits heard, 8,583 were decided for plaintiffs, 701 for defendants, 404 non-suited, 219 struck off, 8,056 compromised and 89 undecided. The total gross amount carried to credit of Government on account of fees was Rs. 66,026-5, being chiefly fees on institution of summonses. The amount repaid to suitors was Rs. 11,428-3 leaving Rs. 54,598-2, as the net amount carried to credit of Government. The following will show the number of causes in 1859 as compared with the previous year :—

	1858.	1859.
Judgment for Plaintiffs ...	8,247	8,583
Judgment for Defendants ..	770	701
Non-suited and struck off ...	846	623
Compromised ...	7,623	8,056
Undecided ...	75	89
	<hr/> 17,561	<hr/> 18,052

The increase of fees over 1858 amounts to Rs. 11,035-4-6. The monthly cost of the establishment was Rs. 6,274-8, including one Judge at Rs. 1500, and two at Rs. 1,000 each. The unrecovered costs amounted to Rs. 101. The following is a statement of the statistics of the Court for nine years :—

Statement showing the number of Suits instituted in the Madras Court of Small Causes, and the amount of fees realized thereon, during the years 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858 and 1859, together with the progressive increase and decrease in each year.

Year.	Number of causes instituted.	Increase of causes in each year.	Decrease of causes in each year.	Fees realized.			Increase of Fees in each year.			Decrease of Fees in each year.		
				Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
1851	23,668	...	...	37,417	7	0	...	...	...	...	...	...
1852	24,392	724	...	43,349	2	3	5,931	11	3	...	...	...
1853	25,192	800	...	46,479	10	0	3,130	7	9	...	...	...
1854	26,483	1,291	...	49,281	10	0	2,802	0	0	...	...	...
1855	26,199	...	284	51,754	12	0	2,473	2	0	...	...	...
1856	22,869	...	3,380	48,682	14	6	...	...	...	8,071	13	6
1857	17,674	...	5,195	36,909	10	6	...	...	...	6,773	4	0
1858	18,020	346	...	43,564	13	6	6,655	3	0	...	...	...
1859	18,374	354	...	54,600	2	0	11,035	4	6	...	...	...

PUBLIC DEBT OF INDIA.

Parliamentary Papers.

1860.

RETURN to an Address of the Honourable The House of Commons, dated 23rd April 1860 ;—*for*, an “ Account of the Public Debt of *India* ; showing the Amount of each Loan with the Rate of Interest thereon, and distinguishing the Proportions severally retained in *India*, and Registered at the India House, under Enfacement for Payment of Interest or for Transfer into Stock.”

	Amount of each Loan of the Public Debt of India on the 1st May 1859, the date of the last Advice received.	Rate of Interest thereon.	Proportion Retained in India.	Proportion Registered at the India House, under Entrance ment for Payment of Interest, or for Transfer into Stock, on the 1st May 1860.
	£		£	£
Loan transferred from Fort Marlborough ...	763	10 p. cent.	763	...
Madras Permanent Loan ...	15,400	8 "	15,400	...
Loan from the King of Oude	360,723	6 "	360,723	...
Madras Permanent Loan ...	8,050	6 "	8,050	...
Loan from the King of Oude	1,240,000	5 "	1,240,000	...
Loan from individuals ...	4,800	5 "	4,800	...
Public Works Loan of 31st March 1855 ...	2,744,870	5 "	2,592,590	152,280
Stipend Fund of the Bhow Begum ...	519,276	5 "	519,276	...
Loan of 28th Feby. 1857 ...	20,229,253	5 "	16,758,743	3,470,510
Loan of 28th Feby. 1857 ...	373,030	4½ "	372,930	100
Loan of 1824-25 ...	86,069	4 "	85,069	1,600
Loan of 1828-29 ...	28,746	4 "	27,018	1,728
Loan of 1832-33 ...	5,206,148	4 "	5,133,844	72,304
Loan from the King of Oude	170,000	4 "	170,000	...
Loan from the Charity Fund	30,000	4 "	30,000	...
Loan of 31st March 1836 ...	4,280,453	4 "	4,185,403	95,050
Loan of 1st Feby. 1843 ...	10,791,430	4 "	10,351,890	439,540
Loan of 30th June 1854 ...	9,702,940	4 "	9,503,100	199,840
Transfer Loan ...	2,612,537	4 "	2,612,537	...
Loan of 28th Feby. 1854 ...	86,820	3½ "	86,820	...
TOTAL REGISTERED DEBT £	58,491,908	...	54,058,956	4,432,952
Temporary Loans ...	392,619			
Treasury Notes and Bills ...	1,386,819			
Miscellaneous Deposits ...	5,810,655			
TOTAL INDIAN DEBT AT INTEREST £	66,082,031			
<i>Note.</i> —Subscriptions have been received to the 5½ per Cent. Loan of 1859-60, opened on the 1st of May 1859: in Cash, £5,015,520; in 5 per Cent. Paper, £4,879,130 = £9,894,650: of which there has been registered at the India House ... £				
Total Amount of the Public Debt of India registered at the India House, 1st May 1860 ...				£ 1,049,390
Total Amount of the Public Debt of India registered at the India House, 1st May 1860 ...				£ 6,382,342

GEORGE FRIEND,
Accountant General.

REPORT ON THE SETTLEMENT OF THE UMRITSUR DISTRICT.

Punjab Records, 1860.

THE Report of the Settlement Officer, Mr. R. H. Davies, embraces the Pergunnahs Umritsur and Sowrian. Turun Tarun is reported upon by his third extra Assistant, Mr. Blyth. These constitute the Baree Doab. The portion of the Umritsur district situated in the Rechnah Doab, viz., the Tehseel of Narowal-Tulwundee, was settled by Messrs. Greathed, Prinsep, Temple, Morris and Blyth. This tract is the most important in that territory. It is the Manjha of the Sikhs, and it lies on or near what must eventually be the Grand Trunk line whether for rail or road. The population are chiefly Jats; there are also some Rajpoots and Goojurs. The country, though deficient in trees and luxuriant vegetation, is very healthy.

Sowrian.—The total number of Townships is 342.

The Revenue is distributed as follows :—

Khalsa,	...	...	...	Rs. 1,95,590
Jageer,	...	...	...	76,251
Inam,	...	...	...	1,320

Total, Rs. 2,73,161

The total area is 407 square miles or 2,60,856 acres, of which 1,23,938 are cultivated, 39,738 uncultivated—assessed, and 15,563 Lakhiraj, and 81,617 barren—unassessed. The population is 1,51,580. The population per square mile is 372. The average revenue is Rs. 1-12-4 per head. There are 70 Putwarees collecting on an average Rs. 3,902. Average wages Rs. 117 per annum. There are 375 chowkedars.

Umritsur.—Tehseel Umritsur, as newly marked out after survey, is bounded on the North and East by Butalah, on the South by Turun Tarun, on the West by Sowrian and Lahore. It consists of 373 muhals. The revenue is divided as follows :—

Khalsa,	...	...	...	Rs. 3,32,834
Jageer,	...	...	...	96,037
Inam,	...	...	...	3,336
Talookdaree,	...	...	...	234

Total, Rs. 4,32,416

The area is 547 square miles, namely:—

Assessed.		Unassessed.	
Cultivated.	Uncultivated.	Lakhiraj.	Barren.
2,19,037	48,618	21,588	60,780

Total acres 3,50,031

The population of the town of Umritsur is 1,00,466, the total population is 1,92,269. The average per square mile is, within the city 534, without the city 345. The average revenue Rs. 1-7-8 per head. There are 111 Putwarees collecting on an average 3,896 Rupees, and receiving each Rs. 117. There are 408 chowkeedars, paid either in money, grain, or rent-free land.

Turun Tarun.—The total revenue is Rs. 10,36,669; the expenditure Rs. 1,55,069, the percentage on jumma being 15 and on area 15. The number of mouzahs is 348. Ulsee muhals 363, Dakhee muhals 5, Rukhs 9. The total area is 3,82,330, of which 3,24,930 are assessed, and 57,400 unassessed. Irrigation is entirely carried out by means of wells.

General Remarks.—The population of the Umritsur district is dense, being on an average 436·75 to the square mile. Cultivation will be much extended, when the irrigation is improved, and Railways are in operation.

The sub-division of Umritsur is divided into seven circles for purposes of assessment. "The revenue rates per acre assumed for the irrigated lands in the several circles and classes, ranged from Rs. 2-4 to Rs. 4-5, and for unirrigated lands from annas 13 to Rs. 2-6. The variation is considerable, as might be expected where so many classes prevail. The result of the assessment was a reduction of 10 per cent. from the summary settlement. The average rate of assessment per acre stood at Rs. 2-2-3 at the summary settlement, and at Rs. 1-14-9 at the revised settlement." The tenures are nearly all bhyachara. The cost of the settlement was 11 per cent. on the revenue, which is moderate. Sowrian is divided into 6 circles, each having 2 or 3 classes. The revenue rates range from Rs. 1-14 to Rs. 4 per acre for irrigated lands, and from Re. 1 to Rs. 2-11 for unirrigated lands. Those assessed at the last named rate are moist and occasionally flooded. The revised settlement shows a re-

duction of 15 per cent. on the summary settlement. The average rate per cultivated acre of the summary settlement was Rupees 2-9-9, that of the revised assessment Rs. 2-3-5. The tenures are nearly all bhyachara. The cost of settlement was 21 per cent. on the revenue, which is heavy.

Tarun Tarun was divided into four circles and each circle into 3 or 4 classes. The rates for the richer circles ranged from Rs. 2 to Rs. 4-6 per acre on irrigated lands and from Rs. 1 to 2-3-3 on unirrigated lands (including however river lands.) The rates for the ordinary Manjha lands ranged from 15 annas to Rupees 1-13 per acre irrigated, and from 7 annas to 1 Rupee unirrigated—for the inferior Manjha lands the rates ranged from 14 annas to Rs. 1-3-6 per acre irrigated, and from 6 annas to 9 annas unirrigated. The summary settlement in this district was so moderate that the revised settlement leaves the revenue almost unchanged. The settlement is to be confirmed for ten years from the date on which the assessments may have been announced, or until a new settlement may be ordered after the expiry of the ten years. The right is reserved of extending or altering the settlement, as may seem advisable at that period. The following is an abstract of the statistics of the tract under settlement:—

Name of Pergunnah.	Total area in acres.	Summary Govt. Assessment.	Revised Govt. Assessment.	Additions by lapses and resurreptions.	Total present Govt. revenue.	Jager.	Rate of revised settlements on cultivation per acre.	Population, souls.	Population per square mile.
Unritsur, ...	3,49,957	3,49,277	3,30,700	25,356	3,65,086	95,691	1-15-10	2,92,269	534
Sowrian, ...	2,60,856	3,13,213	2,73,150	14,284	2,87,434	1,40,372	2-5-9	1,57,909	372
Turun Tarun, ...	3,76,542	1,99,485	2,05,736	.....	2,05,736	73,517	1-1-0	1,68,459	282

Narowal-Tulwundee.—The assessment of this district commenced in 1850 and extended over a period of nine years. The original jumma was Rs. 3,37,346, which has undergone a reduction of 31 per cent. owing to the inundations of the river deg which caused much distress. The jumma is now as follows :

Khalsa, ...	...	...	...	Rs. 2,02,305
Jageer, ...	...	...	...	62,696
				<hr/>
				Rs. 2,65,001

at the rate of 1-11-3 for cultivated land. The village cesses amount to 21 per cent. more. The jumma is 40 per cent. less than the Sikh jumma.

The area is as follows :—

			Acres.
Cultivated, ...	...	...	1,39,206
Assessable or culturable,	...	...	59,887
Barren waste, ...	...	...	85,057
			<hr/>
Total acres, ...	...	...	2,84,150

of which 2,32,497 acres are khalsa,—and 51,653 acres are held in jageer or maufee tenures.

REPORT ON THE SETTLEMENT OF THE HOOSHIARPOOR DISTRICT.

Punjab Records, 1860.

THE Hooshiarpoor District is an oblong strip of territory lying between the rivers Beas and Sutlej. More than one half is mountainous and the remainder level. The soil varies in quality but is generally rich. The population is dense. The district is well traversed by roads, and well supplied with market towns, of which the chief are Hooshiarpoor, Gurshunkur, Hurrana, Nundpoor, Makhawal and Gurhdiwalla. The following is a statement of the trade of the district :—

<i>Localities.</i>	<i>Exports to</i>	<i>Imports from.</i>
Kangra,	Coarse native cloths, Cotton coarse, Saccharine stuff (for distilling spirits,) and Salt.	Rice, Honey, Iron, Borax.
Cashmere, Punjab Proper,	Sugar.	Pushmeena, fruit, salt, mijeet, almonds, dried fruit, paper.
North-West Provinces, and Bombay,	Saccharine produce.	Cotton, ghee, mill stones, asafoetida, cumin seed, brass and copper utensils chiefly from Furrakabad, sheet iron, sheet copper, fine Europe cloths.

The chief agricultural castes are Jats, Raiens, Mussulman Rajpoots, Brahmins, Goojurs, and Hindoo Rajpoots. Of these, the first three generally inhabit the hills, and the last three the plains. The proportion of the non-agriculturists to the agriculturists is 73 per cent. The average proportion of Mussulmans to Hindoos is 38 per cent. In the hills they are 16, and in the plains 57 per cent. In the whole of the North West Provinces the Mussulmans are 19 per cent. of the Hindoos. The number of inhabitants per square mile in the four Pergunnahs is 325.75. The average for the North West Provinces is 322.03. The number of acres to each person in the plains is 1.37, and on the total of hills and plains 1.97. The total number of inhabited villages is 1,479. The average number of inhabitants to each house is 4.70. The number of men exceeds the number of women in the ratio of 100 to 90.

For purposes of assessment the district was divided into ten circles, which were sub-divided into classes. Under the Mahomedan Emperors the country was divided into pergunnahs and tuppahs in such a discriminating manner that some of their divisions still retain the limits assigned to them. In 1832 the Lahore Government appointed the Missr Roop Lall to the administration of the district, and his assessment forms the basis of subsequent settlements. In 1846 our Government made a summary settlement of the Doab, which, for the most part, worked very well.

The new assessment divided the country into circles ac-

cording to local peculiarities of soil or position. The hill district was assessed by Mr. Barnes, the plains by Mr. Melvill, and the plans pursued by each differed according to the circumstances which each had to deal with. The rates of assessment in the hills, were as far as possible generalised. Where people were distressed by a heavy tax a reduction was made, and where the tax might with safety be raised to the general standard it was done. The system pursued in the plains was more complicated, but the result was equally satisfactory.

The Report then proceeds to consider the Oona, Hooshiarpoor, Gurshunkur and Hurriana Pergunnahs separately.

Pergunnah Hooshiarpoor, is 22 miles from North to South, and 36 miles from East to West. It is divided into three chuks. viz., the "Dhak" "Seerwal" and "Kundee." Missr Lall's assessment in this pergunnah was very equitable. He resided at Hooshiarpoor himself. The summary settlement worked very well. The uncollected balances amounted only to Rs. 1214 ; of which Rs. 1100 belong to two villages. The new jumma shows an increase on the old, on originally Khalsa lands, of Rs. 3130, which is equal to one per cent. The jummas of 186 villages have been raised ; those of 115 have been maintained ; and in 144 have remissions been granted. There are also 13 newly assessed Jagheer villages. The entire increase has been taken from the Seerwal chuk and amounts altogether to Rs. 12,931, equal to four per cent. on the old jumma.

Pergunnah Gurshunkur, is greater in length than in breadth. In no part is it more than 37 miles long. It is divided into four chuks, namely the "Dhak," "Kundee," "Central," and "Bet."

The summary jumma was very high, especially in the Kundee chuk, and a reduction was considered advisable. The result of the new assessment stands thus

Summary Jumma,	Rs. 2,62,785
Proposed Jumma (exclusive of resumed Mafee,)	,, 2,36,635

Decrease,	Rs. 26,150
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or nearly ten per cent. which is divided amongst the Dhak, Kundee and Central chuks, and the Manuswal Taluquah. The total reduction in the whole Pergunnah amounted to Rs. 23,705, the total revenue being Rs. 2,39,080

Pergunnah Hurriana, is partly composed of hill country. Its extent is from East to West 36 miles, and from North to South 20 miles. The chuks of this district are a continuation of those

in the former called the Kundee, the Seerwal and the Central. The summary jumma did not work well here, and the collections are not made without some trouble. The jumma has accordingly been reduced, by about $7\frac{1}{2}$ per cent. exclusive of resumed and Mafee groves; while, including these, the total new jumma falls short of the old one by Rs. 11,376, or 4 per cent.

Pergunnah Oonah is entirely in the hills; it is 48 miles long and 15 broad. The face of the country is variegated; artificial irrigation is not much practised and market towns are rare. The new jumma, exclusive of the increase from resumed Mafee, shows a decrease on the old of Rs. 10,868, and including resumed Mafee and groves Rs. 9,196 or nearly 6 per cent. This does not include the Talooquah of Jhundburree which was assessed by a different officer and in a different manner. This district could with difficulty pay the summary jumma, and relief was accordingly afforded, by making a total reduction of 37 per cent. including resumed Mafees and groves. The grand result of the assessment in the Oonah Pergunnah is therefore as follows :—

Total Summary Jumma,	...	Rs.	2,09,358
Total New Jumma,	...	„	1,82,404
Decrease,	...	Rs.	26,954

or 13 per cent. or including resumed groves and Mafees, nearly 12 per cent.

The number of suits relating to proprietary right in the four Pergunnahs, 4,065, was very considerable, and showed that land is valuable. Of the tenures, 15 per cent. were Zumeendaree, and the remainder Bhyacharah. The cost of the settlement amounted to Rs. 1,69,707, being about 17 per cent. on the revenue, which is moderate. The assessment of the Seerwal villages was to be revised; but with regard to the rest of the district the Chief Commissioner was prepared to confirm the settlement for thirty years, from the date on which the revised assessments took effect.

The following table will show the general result of the settlement.

Name of Tehseel or Sub-Division.	Revenue of Summary Settlement.	Revised Assessment.	Total with addition from losses and re-surreptions.	Rate per cultivated acre of revised settlement.		
	Rs.	Rs.	Rs.	Rs.	As.	P.
Hooshiarpoor,	3,02,157	3,05,287	3,15,088	1	15	3
Gurshunkur,	2,62,785	2,36,634	2,39,080	1	15	0
Hurriana,	2,77,134	2,56,206	2,65,758	2	5	2
Oona hill and valley,	2,09,358	1,82,401	1,84,415	1	8	10
Grand Total, ...	10,51,334	9,80,532	10,04,341	1	15	0

CASES IN MADRAS POLICE OFFICES.

1859.

ON the 30th April 1860 Colonel Boulderson submits his report on the operations of the Police Force and establishments connected with the Police. The number of cases disposed of in the three Police Courts of Madras during 1859 was 23,123, against 17,753 in the preceding year, being an increase of 5,370 cases, which is attributed to the "large number of common nuisance cases and of cases of breach of discipline brought against the Police officers." Heinous offences were few in number, but of kidnapping children there were 7 cases committed to the Sessions; 16 children were restored.

The Coroner's report shows that 196 inquests were held during the year, being 31 less than during 1858. Attention is called to the large number of deaths by injuries received in public

thoroughfares. There were twelve such deaths against eight the previous year. The cause of these fatal accidents was partly that no "rule of the road" was known or acted on by the natives, and collisions were therefore of frequent occurrence. Of the 196 cases the most remarkable were the following :—

Murder	...	..	...	...	5
Suicide	...	..	...	..	12
Death from shark bites	...	..	...	...	2
Ditto from snake bites	...	..	...	...	3
Accidental death by drowning	...	..	...	...	51
Death from Cholera	....	...	...	...	4
Ditto from Sun-stroke	..	...	...	...	1
Found drowned	...	..	...	...	17
Found dead	...	..	...	...	10

The mortuary Report for 1859 furnished by the Municipal Commissioners, shows that the total number of deaths within the jurisdiction of the Supreme Court of Madras was 10,266, or an average of 855 a month; the highest number, 1317, occurred in February, the lowest, 663, in November. Of the 10,266 persons who died, 3299 were males, 3183 females, and 3784 children under 12 years of age. The exact population of Madras was not known, but the next report will shew the rate of mortality, as by that time the Municipal Commissioners will have ascertained the "number of men, women and children residing in each house, distinguishing Christians, Hindoos and Mussulmen."

The number of cargo boats floated during the year was 1,43,683, and the sum paid into the general Treasury was Rs. 26,967-9 being a tax of 3 annas per trip, and 27 Rupees for fines levied. The fines levied by Magistrates, fees, sales of unclaimed, property &c. realised 17,927-1-10. In the Madras Penitentiary there remained on the 31st December 1858, 256 prisoners; during 1859, there were 1569 admitted, 1473 discharged; 15 died, and 337 remained on the 31st December 1859. The following is the usual annual statement of Police cases.

General Comparative Statement of Cases summarily disposed of by the Magistrates and those committed for trial to the Criminal Quarterly Sessions in Her Majesty's Supreme Court of Judicature at Madras, from the Royapet, Town and Terepy Police Courts, during the year 1859.

CHARGES.	Number of cases.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons imprisoned.	Number of persons lodged.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Number of persons sent on Board.	Number of persons reduced.	Number of persons suspended.	Total number of persons.
Infanticide, ...	1	1	...	...	...	...	...	1	1	...	...	1
Manslaughter, ...	1	1	...	...	...	...	...	1	1	...	...	1
Burglary, ...	1	1	...	...	...	...	...	...	...	...	...	1
Breaking and entering houses with intent to steal.	6	...	4	...	...	...	...	1	...	...	...	6
Feloniously and unlawfully attempting to administer poison with intent to commit murder, ...	2	...	...	...	...	...	...	2	...	...	...	2
Shooting with intent to murder, ...	...	...	...	...	...	...	...	...	...	...	...	...
Cutting and wounding with intent to murder, ...	2	2	1	...	...	...	...	...	...	...	...	...
Rape, ...	3	3	...	...	...	...	...	3	...	...	...	3
Arson, ...	1	1	...	...	...	...	...	1	...	...	...	1
Assault with intent to commit sodomy, ...	2	2	...	...	...	...	...	2	...	...	...	2
Instigating rebellion, ...	...	...	...	...	...	...	...	...	...	...	...	...
Assault with intent to commit rape, ...	1	1	...	...	...	...	...	...	...	...	...	1
Crimping, ...	6	6	15	...	...	...	...	1	1	...	...	16
Forging and uttering, ...	4	4	1	...	...	...	...	6	...	...	...	7

[illegible]

General Comparative Statement of Cases summarily disposed of by the Magistrates, &c.—(Continued.)

CHARGES.	Number of cases.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons imprisoned.	Number of persons lodged.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Number of persons sent on Board.	Number of persons reduced.	Number of persons suspended.	Total number of persons.
Aiding and abetting in stealing goods under 50 rupees value, ...	11	...	1	...	...	...	...	7	...	...	...	14
Attempting to defraud, ...	1	...	...	...	...	...	...	1	...	...	...	1
Aggravated assault, ...	25	...	17	...	...	14	...	6	...	...	...	37
Taking forcible possession of property, ...	14	...	...	...	...	...	...	18	...	...	...	18
Found in possession of stolen property without satisfactorily accounting for the same, ...	...	...	...	...	...	...	...	...	...	...	...	...
Trespass into dwelling houses without satisfactory excuse or on public and on Government ground and removing soil, ...	180	...	54	...	1	46	...	125	...	...	...	229
Receiving stolen property, ...	212	...	3	...	...	115	...	120	...	...	...	238
Purchasing property from children under the age of 14 years, ...	131	...	52	...	6	11	...	113	...	...	...	182
Assaulting or resisting Police Officers in the execution of their duty, ...	12	...	...	...	...	14	...	2	...	...	...	16
Wrongful appropriation of property found, ...	206	...	29	...	...	165	...	108	...	...	...	305
Continued wilful disobedience to lawful commands — Merchant Shipping Act of 1854 and Act No. I. of 1859, ...	3	...	1	...	...	...	...	3	...	...	...	4
	16	...	51	...	...	...	...	1	18	...	...	70

Continued wilful neglect of duty—Merchant Shipping Act of 1854 and Act No. XXVIII. of 1850,	17	...	53	...	...	...	3	...	...	56
Surprisingly obtaining a passage—Merchant Shipping Act of 1854 and Act No. I. of 1850,	1	...	2	...	...	...	...	...	...	2
Breach of the peace, riotous behaviour, &c.,	3,067	...	48	...	1	4,350	1,355	...	1	5,755
Disturbing religious ceremonies,	3	...	1	...	...	1	1	...	...	3
Gambling,	157	...	21	...	4	301	98	...	...	424
Keeping gaming houses,	7	...	2	...	...	17	...	...	...	19
Keeping brothels or lodging houses for disorderly persons,	16	...	...	...	...	8	27	...	...	35
Stealing animals,	11	...	1	...	5	...	6	...	...	12
Wilful disobedience to lawful commands—Merchant Shipping Act of 1854 and Act No. XXVIII. of 1850,	15	...	44	...	...	1	22	8	...	75
Refusing to maintain wife and children,	595	...	10	...	...	154	274	...	...	438
Having in possession false weights and deficient measures,	28	...	2	...	...	22	4	...	...	28
Drunkenness,	610	...	7	...	...	572	42	...	2	632
Riding or driving furiously along the public roads and without lights,	927	...	...	...	...	740	196	...	...	936
Playing country music without a license,	49	...	...	...	...	30	37	...	...	67
Obstructing the public roads,	393	...	...	...	...	267	178	...	...	445
Begging in the public roads,	7	...	3	...	...	...	4	...	...	7
Landing grain beyond the special limits—Boat Act No. IV. of 1842,	3	...	...	...	...	...	...	...	...	5
Overloading—Boat Act IV. of 1842,	6	...	...	...	...	7	5	...	...	8
Corruption,	...	...	...	...	...	...	1	...	...	...
Misemeanors (misconduct of Police Officers),	108	...	...	...	...	73	24	...	1	108
Corruption by Police Officers,	18	...	6	...	...	61	7	...	...	21
Disobedience,	52	...	...	...	...	29	17	...	1	52
Neglect of duty,	2,218	...	...	...	...	2,047	116	...	12	2,218

General Comparative Statement of Cases summarily disposed of by the Magistrates, &c.—(Continued.)

CHARGES.	Number of cases.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons imprisoned.	Number of persons flogged.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Number of persons sent on Board.	Number of persons reduced.	Number of persons suspended.	Total number of persons.
Violation of duty, do. ...	21	...	10	...	...	18	...	10	...	...	...	38
Contempt in the Police Court, ...	6	...	...	...	...	7	...	...	...	...	...	14
Willful neglect of duty—Bout Act No. IV. of 1842, ...	4	...	...	...	8	1	...	28	...	...	...	37
Refusing to pay wages—Merchant Shipping Act of 1854 and Act No. I. of 1859, ...	2	...	...	...	...	...	...	2	...	...	...	2
Desertion—Bout Act No. IV. of 1842, Merchant Shipping Act of 1854 and Act No. XXVIII. of 1860, ...	44	...	75	...	20	...	...	6	13	...	...	114
Assault—Merchant Shipping Act of 1854 and Act No. I. of 1859, ...	9	...	9	...	...	...	...	2	...	...	...	11
Allowing prisoners to escape, ...	...	...	...	...	...	...	...	...	...	...	...	...
Aiding and abetting the escape of a convict from jail, ...	1	...	1	...	...	...	...	1	...	...	...	2
Discharging guns or fireworks in or near the public streets, ...	22	...	...	...	...	17	...	8	...	...	...	25
Escaping from legal confinement, ...	2	...	1	...	...	...	...	1	...	...	...	2
Nuisance, ...	7,158	...	5	...	9	6,554	...	602	...	...	...	7,170

Taking spirits into the barracks or jails,	2	1	1	1	1	2	2
Purchasing Regimental clothing, &c., from soldiers,	3	3	3	3	3	3	3
Embezzlement,	1	1	1	1	1	1	1
Poisoning cattle,	67	2	2	2	2	2	2
Using indecent or threatening language in the public streets,	4	1	1	1	1	1	1
Letting loose ferocious animals,	4	1	1	1	1	1	1
Keeping taverns or Chandoo shops without license from the Commissioner of Police,	4	1	1	1	1	1	1
Breach of such license,	5	1	1	1	1	1	1
Abandoning by Apprentices—Act No. XIX. of 1850,	2	1	1	1	1	1	1
Affixing placards,	1	1	1	1	1	1	1
Ill-treating animals,	336	304	304	304	304	304	304
Leaving carts or animals without control,	66	49	49	49	49	49	49
Found after sunset armed with dangerous weapons,	1	1	1	1	1	1	1
Selling obscene books,	1	1	1	1	1	1	1
Bathing in a prohibited tank,	1	1	1	1	1	1	1
Indecent exposure in the street and behaviour in the Public Court,	201	194	194	194	194	194	194
Prefering charges without sufficient grounds,	46	46	46	46	46	46	46
Failing to prosecute without sufficient reason after making complaint of an offence,	36	25	25	25	25	25	25
Breach of the Akbarry Act No. XIX. of 1852,	1	1	1	1	1	1	1
Breach of the Post Office Act No. XVII. of 1854,	8	7	7	7	7	7	7
Breach of the Railway Act No. XVIII. of 1854,	438	265	265	265	265	265	265
Breach of the Conservancy Act No. XIV. of 1856,	22	19	19	19	19	19	19
Breach of the Wheel Tax Act No. XXVI. of 1856,	8	2	2	2	2	2	2
Breach of the Marine Police Act No. XXVIII. of 1858,	6	2	2	2	2	2	2
Breach of the Arms Act No. XXVIII. of 1857,	51	47	47	47	47	47	47
...	6	4	4	4	4	4	4

General Comparative Statement of Cases summarily disposed of by the Magistrates, &c.—(Continued)

CHARGES.	Number of cases.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons imprisoned.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Number of persons sent on board.	Number of persons reduced.	Number of persons suspended.	Total number of persons.	
Breach of Section 13 of Act No. XII. of 1857 respecting the Land Revenue of Madras,	44	..	..	..	1	..	..	..	..	..	46
Breach of Contract Act—No. XIII. of 1859,	..	..	..	..	..	..	..	..	..	..	..
Breach of Act No. VI. of 1857 regarding the acquisition of land for public purposes,	..	..	..	..	..	..	..	..	..	..	..
Using Catamaran without its being branded—	..	..	..	..	..	..	..	..	..	..	..
Boat Act No. IV. of 1842,	1	..	..	..	1	..	3	..	..	..	4
Grand Total,	23,123	10	1,206	..	461	17,555	28	6,956	39	18	41	26,318

There was one person sentenced to death for murder. The total number of cases was 23,123, implicating 26,318 persons.

CRIMINAL JUSTICE IN THE MADRAS PRESIDENCY.

1859.

THIS report is dated 31st May 1860 and consists of tables submitted by the Judges of the Foujdary Adawlut, illustrative of the administration of Criminal Justice in the Zillahs of the Madras Presidency during the year 1859. The Village Police investigated during the year 27,044 cases, against 26,012 in 1858. The number of convictions and punishments was 8,943, against 8,439 the previous year; and 4,907 were discharged without trial, 5,028 were acquitted, and 8,166 were referred to higher authorities. The district Police investigated 2,29,968 cases against 2,35,274, in 1858. Of this number 66,688 were dismissed, 99,558 acquitted, 49,252 convicted and punished, 9,938 referred to higher Courts, and 2,949 died, escaped, or otherwise disposed of. The Subordinate Judges, Principal Sudder Amcens, and Sudder Amcens had 7,902 cases brought before them, against 9,507 in 1858; of this number 32 were dismissed, 2,618 acquitted, 1,952 convicted, 2,867 referred to Session Judges and 230 otherwise disposed of. Before the Magistrates, Joint Magistrates and Assistant Magistrates 12,000 cases were brought up, against 11,284 the previous year; of these 370 were dismissed, 5,557 acquitted, 3,830 convicted, 484 committed to subordinate Criminal Courts and 1,363 otherwise disposed of. The Sessions Judges took up 3,868 cases against 4,874 in 1858; of these 11 were dismissed, 1,729 acquitted, 1,334 convicted, 342 referred to Foujdary Court, 67 remanded to Lower Courts, and 206 otherwise disposed of. Before the Foujdary Adawlut 401 cases were brought, against 449 in 1858, 182 were released unconditionally, 4 released on security, 198 convicted, 1 remanded, and 3 otherwise disposed of. The principal sentences passed by all the Courts on criminals were the following, fined 45,983, flogged 785, imprisoned, for periods varying from 1 month to 21 years, 17,629, of which 14,671 were imprisonments for 1 month, imprisoned for life 1, transported 33, put to death 51.

Average Duration of Cases referred to the Boujdary Adawlut.

Years.	From apprehension to commitment.	From commitment to reference.	From transference to receipt.	From receipt of reference to sentence.	Total from apprehension.
	Days.	Days.	Days.	Days.	Days.
1855.	22	50	7	5	84
1856.	20	53	7	8	88
1857.	21	55	7	10	93
1858.	16	43	7	6	72
1859.	17	43	7	6	73

There were 86,677 cases of offences against the person, in which 2,40,596 persons were concerned, and 1,96,492 apprehended, of this number 37,673 were flogged or fined. The total number convicted was 45,933, and acquitted 70,741, the remainder were disposed of in various ways. The principal offences were murder, for which 928 were apprehended, assault with wounding 1,343, rape 91, poisoning 91, abortion 73, affray 10,034 and petty assault 1,83,096. Of other offences the following are the chief particulars :—

Offences against Property committed with Violence.

Offence.	Accused.	Acquitted.
Dacoity, ...	3,080	2,371
Highway Robbery, ...	1,309	1,017
Theft, Burglary, &c., ...	205	166
Affray, ..	209	160

Offences against Property without Violence.

Burglary,	4,658	3,605
Theft,	18,017	10,117
Receiving stolen Goods,	1,155	656
Fraud,	1,390	910
Trespass,	5,591	2,009

Miscellaneous Offences against Property.

Arson,	582	522
Killing and maiming other person's cattle,	1,094	916
Damaging crops, &c.,	384	252

Forgery and Offences against the Currency.

Forgery,	496	407
Counterfeiting Coin,	24	14
Possessing ditto,	56	38

Miscellaneous.

Prison breaking,	222	64
Perjury,	77	43
Riot Sedition, &c.,	27	3
Felonies, misdemeanors and other offences,	16,385	7,479

REPORT ON INDIAN ADMINISTRATION.

1858-59.

Legislation—The Acts passed during the official year are Acts Nos XIX. to XLI. of 1858 and I. to X. of 1859.

Act XIX. of 1858 (An Act to provide for the authentication of Stamped Paper issued from the Stamp Office in Calcutta.)

Act XX. of 1858 (An Act to facilitate the recovery of land and other real property, of which possession may have been wrongfully taken during the recent disturbances in the North-Western Provinces of the Presidency of Bengal.)

[Temporary.]

Act XXI. of 1858 (An Act for the regulation of Native Passenger Ships, and of Steam Vessels intended to convey Passengers on coasting voyages.)

Act XXII. of 1858 (An Act to continue in force for a further period Acts XIV. of 1857, XVI. of 1857, and XVII. of 1857, and to authorize in certain cases the transportation of offenders sentenced to imprisonment.)

[Temporary.]

Act XXIII. of 1858 (An Act for bringing the District of Kurnool under the Laws of the Presidency of Fort St. George.)

Act XXIV. of 1858 (An Act to continue for six months the privileges granted by Act I. of 1844 to certain members of the family, household, and retinue of his late Highness the Nabob of the Carnatic.)

Act XXV. of 1858 (An Act for appointing Municipal Commissioners and for raising a Fund for Municipal purposes in the Town of Bombay.)

Act XXVI. of 1858 (An Act to make further provision for the trial and punishment of offences against the State.)

[Temporary.]

Act XXVII. of 1858 (An Act to continue in force for a further period of six months Act IV. of 1858, for providing for the exercise of certain powers by the Governor General during his absence from the Council of India.)

[Temporary.]

Act XXVIII. of 1858 (An Act for the maintenance of a Police Force for the Port of Madras.)

Act XXIX. of 1858 (An Act for the relief of persons who, in consequence of the recent disturbances, have been prevented from instituting or prosecuting suits or appeals in the Civil Courts of the North-Western Provinces within the time allowed by law.)

[Temporary.]

Act XXX. of 1858 (An Act to provide for the administration of the Estate and for the payment of the debts of the late Nabob of the Carnatic.)

Act XXXI. of 1858 (An Act to make further provision for the settlement of land gained by alluvion in the Presidency of Fort William in Bengal.)

Act XXXII. of 1858 (An Act for bringing the Fort of Tanjore and the adjacent Territory under the Laws of the Presidency of Fort St. George.)

Act XXXIII. of 1858 (An Act to amend Act XII. of 1844, for better securing the observance of an exact discipline in the Indian Navy.)

Act XXXIV. of 1858 (An Act to regulate proceedings in Lunacy in the Courts of Judicature established by Royal Charter.)

Act XXXV. of 1858 (An Act to make better provision for the care of the Estates of Lunatics not subject to the jurisdiction of the Supreme Courts of Judicature.)

Act XXXVI. of 1858 (An Act relating to Lunatic Asylums.)

Act XXXVII. of 1858 (An Act to continue certain privileges and immunities to the family and retainers of his late Highness the Nabob of the Carnatic.)

Act XXXVIII. of 1858 (An Act to repeal Regulation V. 1832 of the Bengal Code, and to make certain provisions rendered necessary by the transfer of the Delhi Territory to the administration of the Chief Commissioner of the Punjab.)

Act XXXIX. of 1858 (An Act for the better recovery of Arrears of Revenue under Ryotwar settlements in the Madras Presidency.)

Act XL. of 1858 (An Act for making better provision for the care of the persons and property of Minors in the Presidency of Fort William in Bengal.)

Act XLI. of 1858 (An Act to amend Regulation X. 1829 of the Bengal Code, for the collection of Stamp Duties.)

Act I. of 1859 (An Act for the amendment of the law relating to Merchant Seamen.)

Act II. of 1859 (An Act to amend Act XXX. of 1858, to provide for the administration of the Estate, and for the payment of the debts of the late Nabob of the Carnatic.)

Act III. of 1859 (An Act for conferring Civil Jurisdiction in certain cases upon Cantonment Joint Magistrates, and for constituting those Officers Registers of Deeds.)

Act IV. of 1859 (An Act to make further provision for the removal of Prisoners.)

Act V. of 1859 (An Act to empower the holders of Ghatwalee lands in the District of Beerbhoom to grant leases extending beyond the period of their own possession.)

Act VI. of 1859 (An Act to empower the Governor of Bombay in Council to appoint a Magistrate for certain Districts within the Zillah Ahmedabad.)

Act VII. of 1859 (An Act to alter the Duties of Customs on Goods imported or exported by Sea.)

Act VIII. of 1859 (An Act for simplifying the Procedure of the Courts of Civil Judicature not established by Royal Charter.)

Act IX. of 1859 (An Act to provide for the adjudication of claims to property seized as forfeited.)

Act X. of 1859 (An Act to amend the law relating to the recovery of Rent in the Presidency of Fort William in Bengal.)

Finance.—Old balances on the general books of the Accountant General's Office, amounting to Rupees 53,01,134, were adjusted during the year, and the unadjusted balances of the

Public Works Department, Civil and Military, under the old system of account, were reduced from Rupees 4,33,168 to Rupees 50,072. Unadjusted balances of very long standing, on the Books of the Accountant to the Government of Bengal, amounting to Rupees 9,83,604-9-2, connected with the Revenue, Judicial, Salt, Opium, and Marine Departments, were also adjusted. Under the former system the final adjustment of Railway advances in the Provinces was delayed for from 12 to 18 months. By the use of a special form of Railway Bill payable on demand, the delay is reduced to five months. Owing to the great augmentation of European troops, the Military and Civil Branches of the Savings' Bank were separated at an increase of charge of Rs. 740 per month. Interest on Government Promissory Notes was allowed to be paid in London by Bills on demand on the Indian treasuries. Treasury Bills bearing interest at the rate of one-fourth of an anna a day per cent. were allowed to be issued in sums of 200, 500, 1,000, 5,000, and 10,000 Rs. respectively. (On the 21st February 1859, it was announced that the sum of three millions sterling had been sent for from England, that for 1859-60 five crores would be raised in India and no further loan opened in India that year. Accordingly on 28th April 1859 the 5½ per cent. loan was notified. On the 30th April the issue of the Treasury Bills was closed and a new issue of Bills at 2½ pie per cent. per day was authorised. From 1st May 1859 interest on the 5 and 5½ per cent. loans was made payable either as before or by coupons payable to bearer. It was determined to publish quarterly a statement of the subscriptions to the open loans of the day. A change in the devices of the coins was ordered on the transfer of the Government of India to the Crown. The work of the Mint was not so great as in the previous year, but nearly equal to that of 1855-56 when the bullion transactions of Calcutta received a great augmentation.

Amount of 12 years' coinage from 1843-44

to 1854-55

... Rupees 21,37,35,430

Ditto of 4 years from 1855-56 to 1858-59

„ 21,72,03,267

The merchants sent in Rs. 3,57,28,950 worth of bullion. The total number of pieces coined was 11,25,54,849. The copper coinage numbered 6,79,17,584 pieces, being 1,81,64,758 more than the number coined in the preceding year. Four hundred and forty-four lakhs fifty-seven thousand six hundred and fifty-four pieces were *single pyce* manufactured from copper slabs, whereas the 340½ lakhs of single pyce mentioned in the last report were from copper blanks sent out from England. The dividend of the Bank of Bengal for the first 6 months was 11 per cent., for the last, 12 per cent.

Marine.—The sea-going steamers attached to Bengal were

	<i>Tonnage.</i>	<i>H. P.</i>	<i>Commander.</i>
<i>Fire Queen</i> ...	769,	... 200,	C. Burbank.
<i>Australian</i> ...	1,200,	... 300,	S. G. Boon.
<i>Sydney</i> ...	1,200,	... 300,	G. J. Neblett.

The Transports were the *Sesostris* and *Tubal Cain*. The *Belgravia* was hired as a transport. The sum of Rs. 4,29,928 was paid for 32 vessels to convey 3,361 horses from Australia, the Cape and Buenos Ayres. Of vessels which arrived with troops from England there were 48. Nineteen ships were taken up in Calcutta to convey to England the following invalids; 3,283 men, 180 women and 280 children, at rates per head varying from Rs. 170 to 250. Of surveying vessels there were the *Krishna* and tender, and *Mutlah* and tender. The Irrawaddy Flotilla consisted of

STEAMERS.

Lord William Bentinck.
Nerbuddah.
Mohanuddyy.
Damoodah.
Indus.
Diana.

TROOP BOATS.

Sutlej.
Bhageerutty.
Panlang.
Soane.

CARGO BOATS.

Luckia.
Actæan Flat.
Kelpie Gun Boat.

The steamer *Enterprise* was condemned. The charges for the flotilla and establishment were Rs. 3,00,229. The amount of freight and passage-money earned by the vessels of the Flotilla during the year, was Rs. 1,81,906, of which Rs. 1,37,945 were *pro formâ* receipts on account of Government stores and passengers carried, and Rs. 43,960 cash from the public. The value of stock in the Naval Store Godown at Rangoon on the 30th April last, was Rs. 1,78,748; that of the stock of timber in the yard at Dalla, Rs. 4,835.

The *Gallant* was attached to the Master Attendant's Department at Rangoon, the *Tavoy* being used as a Police Hulk. The receipts of the port were Rs. 50,064 and the charges 32,795. In the Tenasserim and Martaban Provinces, the following were engaged :—

- 1 *Retriever* Buoy Vessel.
- 1 Jolly Boat.
- 2 *Amherst* Row Boat.
- 3 Do. Life.
- 4 Do. do.

- 5 *Amherst* Canoe.
- 6 Master Attendant's Cutter.
- 7 Coal Boat, 10 tons.
- 8 Do. 10 do.
- 9 *Amherstia* Schooner.
- 10 Jolly Boat.
- 11 *Pegu* Schooner.

The Buoy Vessel *Trusty* was condemned and replaced by the *Retriever*. The amount of Port dues received at Moulmein was Rs. 33,015 and the charges 24,740. The Steamer *Pluto* was stationed on the coast. At Tavoy and Mergui there was a small port establishment, at Dalhousie there were

Buoy Vessel *Kate*.

Do. Punt.

Cargo Schooner.

Port Gig and Cutter.

2 Dock Yard lighters for landing Stores.

10 Cutters belonging to Flotilla.

10 Do. to Dock Yard.

The amount of receipts from Port dues was Rs. 8,626, and of disbursements 10,191. The value of all the property under the Marine Department was Rs. 24,87,833 compared with Rs. 26,36,977 of the previous year. The receipts amounted to Rs. 12,55,628 and the expenditure to Rs. 25,12,255. The cost of the Naval Brigades amounted to Rs. 6,73,037; of the Surveying Vessels to Rs. 1,52,818; the Gun Boats to Rs. 1,13,072; the hire of the *Belgravia* to Rs. 1,86,497; and the charges on account of the guard ship *Sesostris* to Rupees 41,177; these sums amounting to Rs. 11,66,601.

ADMINISTRATION OF BENGAL.

1858-59.

I.—REGULATION PROVINCES.

Civil Justice.—There was an increase of institutions chiefly in suits connected with land and land rent. The total of original suits gives the usual result of about 2 to 1 in favour of the plaintiff, viz., 36,012 decided in favour of plaintiff and 19,480 in favour of defendants. The number and quality of the *original* suits may be seen from the following comparative statement :—

	1854.	1855.	1856.	1857.	1858.
Connected with land rent ...	15,204	15,702	17,192	14,745	17,860
Otherwise connected with land ...	6,688	7,250	8,662	8,735	13,066
Connected with debts, wages, &c. ...	41,982	46,178	53,864	53,628	55,534
Connected with caste, religion, &c. ...	1,034	361	558	555	422
Connected with Indigo, Sugar, Salt, &c.	6,593	2,138	2,155	2,172	2,675
	71,501	71,629	82,431	79,835	89,537

Of appeal cases registered for trial during the year before the Sudder, District Judges, and Principal Sudder Amcens, there were in all 21,268 of which 8,344 were pending at the close of the year. There were for trial in the Sudder Court 754 regular, and 927 special admitted appeals, of which were pending at the close of the year, 508 of the former, and 288 of the latter. Of the above 927 special admitted appeals, 523 were admissions of the year. There were also 1,131 *applications* for admission of special appeals wholly rejected, and 351 struck off on default. Of the 5,383 appeals heard by the Judges during the year, 1,189 were decreed for the Appellants, and 2,399 for the respondents, 531 were remanded, and 1,013 dismissed on default. Of the 7,541 appeal cases enquired into by the Principal Sudder Amcens, 1,612 were decreed for the appellants, and 4,084 for the respondents. Of the remainder, 1,242 were remanded, 482 dismissed on default, and 91 adjusted, or withdrawn, or otherwise disposed of. Of the average duration of suits it is merely said that it was on the whole shorter than in the previous year.

Criminal Justice.—The total number of criminals apprehended amounted to 108,177, an increase of 10 per cent. on the previous year. As 3,777 were pending from the previous year and 295 were received by transfer, the total number was 1,12,259. They were disposed of as follows :—

Discharged without trial	...	...	1,017
Acquitted	...	...	34,570
Convicted	...	...	67,995
Committed to the Sessions Judges, &c.	...	...	4,922
Otherwise disposed	...	...	652
Under trial on 31st December, 1858	...	...	3,093

Of these 6,515 were discharged on security and 2,617 dismissed from office. Of the rest 41,958 were fined, 2,300 flogged, 12,702 imprisoned for less than six months, 1,060 between 6 and 12 months, 261 between 1 and 2 years, and 967 between 2 and 3 years. Above 3 years the sentences were imposed by the Sudder and Sessions Judges. The Sessions Judges tried 3,771, of whom they discharged 30 without trial, acquitted 906, convicted 1,466, referred 749 to the Sudder Court, and otherwise disposed of 140. They had 480 under trial at the end of the year. As to punishments they fined and discharged 8, imprisoned for not above 3 years 350, from 3 to 8 years 806, from 8 to 12 years 123, and from 12 to 16 years 158. The number of persons sent before the Sudder Nizamut in 1858 amounted altogether to 1,784, who were disposed of as follows :

Released unconditionally	...	...	285
Convicted	...	...	1,371
Otherwise disposed of	...	...	19
Died in Jail	...	...	3
			<hr/>
Total			1,678
Depending on 31st December, 1858	...	...	106
			<hr/>
Total			1,784

During the year the Sudder Nizamut passed sentence of death on 58 persons ; 19 were sentenced to imprisonment for life ; and 334 to transportation. Of the average duration of cases before the Sudder Nizamut it is merely said that it is exceedingly favourable to the year under review. The description and amount of crime perpetrated will be seen from the following table :—

NATURE OF OFFENCES.	PATNA.		BHAGUL- PORE.		RAJSHAHYE.		NUDDEA.		BIRDHAN.		DACCA.		CHITTA- GONG.		CUTTACK.	
	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.	Cases during 1858.	Yearly average No. of cases during the five previous years.
1. Offences against the person ..	2,560	1,415	1,542	3,277	3,721	6,331	6,221	4,654	3,702	9,016	7,487	6,209	5,676	2,195	1,734	1,734
2. Ditto ditto property committed with violence ..	471	134	44	280	266	90	166	436	327	63	25	26	60	7	13	13
3. Ditto ditto without violence ..	12,346	5,376	4,297	6,546	6,463	4,509	4,074	4,728	3,516	4,094	3,381	1,205	1,101	1,646	1,442	1,442
4. Malicious offences against property ..	107	91	38	172	194	218	71	81	62	567	301	51	21	24	10	10
5. Forgery and offences against currency ..	7	9	5	6	10	12	14	10	14	7	6	7	9	4	6	6
6. Miscellaneous offences	4,533	2,257	2,261	3,114	2,983	6,823	4,482	5,749	4,792	5,956	3,515	2,014	1,138	982	889	889
Total No. of offences of all kinds ..	20,033	9,282	8,167	13,638	18,337	17,953	15,035	15,658	12,413	19,703	14,715	9,515	8,005	4,818	4,044	4,044

The Nuddea Division produced the greatest and the Cuttack Division the smallest number of criminals. The mean average of the ratio of crime to population was 1 to 311. The alleged value of plundered property was Rs. 9,62,988-8-2, of which 12½ per cent. was recovered. The report remarks that this "result is very unsatisfactory, and indicates a lamentable degree of inefficiency on the part of the police."

Police.—Several important measures connected with their improvement were effected. The scheme for the organisation of the *Military* Police was completed. The strength of each battalion was fixed at 900 men and the monthly cost at Rs. 1,00,996. The total number of men enlisted at the close of the year was 7,239. The strength of the mounted men was 533, viz., Adlan's Horse 433 and 1st Police Battalion Sowars 100. The first was raised after the breaking out of the disturbances in Shahabad and Behar. The *Civil* Police were improved under a scheme sanctioned by the Home authorities for granting special promotion to Darogahs for distinguished services, and for raising the salaries of the subordinate grades, at a total additional cost of Rs. 3,38,659.

II. NON-REGULATION PROVINCES.

Civil Justice.—In Assam, Chota Nagpore, Cachar and the Tenasserim Provinces, the Moonsiffs had 14,423 cases of which 3,249 were pending on 31st December 1858. The Sudder Amecus in Assam, the Tarama Thoogrees in Arracan, and the Tseetkays in the Tenasserim provinces, three classes of officers with analogous powers, had 134 appeals and 6,789 original suits. Of these 11 appeals were pending on 31st December 1858 and 432 original suits. The Principal Sudder Amecus in Assam had 1,738 original suits and 244 appeals of which 344 and 27 respectively were pending at the end of 1858. The Assistant Commissioners in Assam, Arracan, Chota Nagpore and Tenasserim had the following cases.

	Cases.		Pending on 31st December, 1858.	
	Original suits.	Appeals.	Original suits.	Appeals.
Assam	9,351	1,287	161	147
Arracan	663	236	49	51
Chota Nagpore	422	1,077	250	457
Tenasserim Provinces ...	990	697	154	105

The Commissioners had the following :—

DIVISIONS.	Cases.		Pending on 31st December, 1858.	
	Original suits.	Appeals.	Original suits.	Appeals.
Assam	54	...	9
Arracan	122	...	2
Chota Nagpore	96	...	54
Cachar	11	62	1	2
Tenasserim Provinces	320	...	35

Criminal Justice.—The number of Criminals apprehended in the Non-Regulation Provinces during the year under review amounted to 15,662, thus:—

In Assam	...	...	...	4,441
In Arracan	...	...	...	2,278
In Chota Nagpore	...	...	...	3,225
In Tenasserim Provinces	...	...	...	5,239
In Cachar	...	...	...	479
Total				15,662

Adding 196 from the previous year and 95 transferred, the total was 15,953 of whom 10,897 were convicted, 4,968 were acquitted, 271 committed to Sessions, 18 discharged without trial, 108 otherwise disposed of, and 191 were under trial at the end of 1858. Of those committed to the Sessions, 121 were convicted, 98 acquitted, and 27 referred to the Sudder Nizamut. The following sentences were passed on those convicted :

Death	...	...	...	8
Transportation	...	...	...	2
Imprisonment for life	...	...	...	5
Imprisonment above 12, and not exceeding 21 years	...	...	...	8
Imprisonment above seven, and not exceeding 12 years	...	...	...	3
Imprisonment above two, and not exceeding seven years	...	...	...	232
Imprisonment above one month, and not exceeding two years	...	...	...	772
Imprisonment not exceeding one month	...	...	...	1,650
Flogged	...	...	...	270
Fined	...	...	...	6,826
Dismissed from Office	...	...	...	230
Discharged on security	...	...	...	522

Police.—The following comparative table shows the quantity and quality of crime :—

NATURE OF OFFENCES.	ASSAM.		ARRACAN.		CHOTA NAGPORE.		DARJEELING.	
	Area 30,462 Square Miles. Po- pulation 1,474,326.	Area 14,130 Square Miles. Po- pulation 369,519.	Area 29,632 Square Miles. Population 2,003,511.	Area 800 Square Miles. Population 54,000.				
	Cases during 1858.	Yearly average No. of cases during the pre- vious five years.	Cases during 1858.	Average No. of cases during the previous five years.	Cases during 1858.	Average No. of cases during the previous five years.	Cases during 1858.	Average No. of cases during the previous five years.
	1,848	2,036	700	539	547	74	91	74
1. Offences against the person	1,848	2,036	700	539	547	74	91	74
2. Offences against property, committed with violence ...	7	21	18	31	212	0	5	0
3. Offences against property, committed without violence	1,773	1,892	238	340	834	105	174	105
4. Malignous offences against property ...	526	328	19	13	72	12	29	12
5. Forgery and offences against currency ...	2	5	5	6	0	0	0	0
6. Miscellaneous offences	1,171	965	990	1,226	526	126	250	126
Total No. of cases of all kinds	5,332	5,247	1,970	2,214	2,191	317	549	317

The first and second classes comprise all the worst offences, such as murder, manslaughter, and homicide, wounding with murderous intent, violent robbery, and the like. The total amount of crime was 10,042 cases to a population of 3,901,356, the mean average being 1 to 388. The alleged value of property stolen was Rs. 1,54,303, of which 20 per cent. was recovered.

Training of Judicial Officers.—In a Minute dated 25th March 1859 the Lieut. Governor recommended that Junior Civil Servants should be nominated assistants to Civil and Sessions Judges in addition to their present duties, with the view of training them as Judges. The Supreme Government approved. By orders of the Court of Directors the viva voce system of trials in petty criminal cases was introduced into all the non-regulation provinces of Bengal.

Dacoity.—The report shews a decrease on the preceding year. In the 24-Pergunnahs there was one attempt; in Baraset none; in Howrah one dacoity and one attempt; in Hooghly a slight decrease was apparent, and in the sub-division of Serampore, a gang of River Dacoits and a gang at Bydiabattce were broken up; in Burdwan, it is feared, the small talookdars were in league with the dacoits, and there was a slight increase; in Nuddeah 40 dacoits were sentenced to transportation for life; in Jessore and Moorshedabad there was a very marked decrease; in Pubna and Furreedpore there were six cases; in Midnapore there was one case less than the previous year but the convictions were numerous. Altogether, the general results for the year were very satisfactory. Two hundred and fifty-four dacoits were transported for life, compared with 126 transported in the previous year. The prisoners sentenced to term imprisonment in 1858, were 108, whereas in 1857 they were only twenty.

Jails.—The Inspector General inspected 43 jails, travelling over 5,546 miles. In custody there were 75,095 prisoners, of whom 53,483 were admitted during the year. The number of females among the whole was 1,016. The cost of the year amounted to Rs. 8,83,919-9-3½ and the average cost for each prisoner to Rs. 43-9-4, or 4 annas 7½ pie less than in the previous year. The most economical jail was Sumbulpore where each prisoner cost Rs. 24-3-1, the most expensive the Kossiah Hills where each cost Rs. 118-12-4. The number of prisoners employed in handicrafts was 5,511, the gross receipts Rs. 2,43,697, and the net profit Rs. 1,05,377 against 1,11,799 the previous year. The most successful jails in regard to prison industry were those of Hooghly, Alipore, Burdwan, Jessore, and Midnapore. In Hooghly only, did each convict handicraftsman earn more than he cost, the earning having

been Rupees 60-9-6·5, while the cost amounted to Rupees 34-7-8. The total value of convict labour and fines was Rs. 3,94,467, or one-half the actual outlay incurred. Sickness and mortality were excessive in the year. The number of deaths was 2,800, chiefly owing to dysentery. Rebels broke open the Gyah and Shahabad jails and there were escapes from these at Mymensingh and Bogra. The number of convicts let loose was 1,447, of whom 900 were re-captured. The ratio of escapes to average strength was 7-14 per cent., and of re-captures 4·43. The amount expended in rewards was Rupees 3,312-12, or at the rate of 310-10-7 to each of the escapes.

Calcutta Court of Small Causes. See separate report at page 245.

Civil and Criminal Report on the Sonthal Pergunnahs.—Mr. Yule, the Commissioner, reports a remarkable increase of crime ; thus :—

		Cases in 1858.	Cases in 1857.
Highway robbery,	...	17	... 12
Burglary,	... ..	515	... 393
Theft,	... ..	1,154	... 618
Rape,	... ..	15	... 8

The apparent increase arises from the greater efficiency of the Police in reporting crime, Munduls having been employed instead of the old Thanadars. The large proportion of cases brought to trial, compared with the Regulation Provinces, simply indicates that sufferers are more ready to apply to the Sonthal Court for redress than to a Magistrate begirt, as Mr. Yule remarks, with "Police Omlah, Mooktears and Stamp Paper, and where every step that is taken, and every word that is written must be paid for." The paucity of criminal appeals is remarkable :—

	No. of Ap- peals.	Confirmed.	Modified or Reversed.
Criminal,	57	33	15
Civil,	74	51	14

Summary suits for rent and against distraint were trifling.

Revenue.—In very few cases was it found necessary to enforce the provisions of the Sale Law. The aggregate collections amounted to $91\frac{1}{2}$ per cent. on the demand, and the amount remitted was less than $\frac{1}{2}$ per cent., leaving a balance outstanding at the close of the year of 8 per cent.

				Demand.	Collections.
				Rs.	Rs.
Bhaugulpore	Division	...	...	31,78,256	28,01,874
Burdwan	Ditto	...	...	78,61,201	75,49,068
Chittagong	Ditto	...	...	26,52,627	23,12,177
Cuttack	Ditto	...	...	22,24,500	16,49,512
Dacca	Ditto	...	...	32,87,164	30,87,256
Nuddea	Ditto	...	...	43,61,009	39,90,947
Patna	Ditto	...	...	88,05,959	78,38,938
Rajshahye	Ditto	...	...	64,40,923	62,29,566
Assam Division, including the Cos-					
siah Hills	...	...	...	9,97,327	9,06,082
Chota Nagpore	...	...	...	3,74,308	3,36,549
Arracan	...	...	...	7,29,085	7,28,007
Darjeeling	...	...	...	36,867	35,896
Tenasserim Provinces	...	...	...	3,40,559	3,34,764
				4,12,92,788	3,77,90,636

Customs and Shipping.—The net revenue amounted to Rs. 1,56,44,541 in the four custom houses of Calcutta, Chittagong, Balasore and Akyab. This is an excess of 31 lakhs on the previous year, and there was a decrease on the charge of collection of Rs. 30,000. The new customs law raising the rate of duty was introduced on 14th March. There was a slight decrease in the shipping. There arrived 950 vessels of 6,72,146 tons, and 960 of 676,196 tons departed.

Salt.—Government imported 1,54,467 maunds of Sind salt in consequence of the ready disposal of a cargo in the preceding year. The receipts were Rs. 1,19,21,769 and the disbursements 38,18,000, giving a net revenue of Rs. 81,03,769, while the revenue of the previous year was Rs. 64,47,683.

Opium and Abkarry.—The net revenue was Rs. 3,73,73,720, against 4,32,17,032 the previous year. The net revenue from Abkarry Opium is estimated at Rs. 10,16,284 against Rs.

6,03,864 the previous year. The total Abkarry demand in Bengal and Tenasserim, was Rs. 33,63,595, of which Rs. 31,97,250 was for spirits and drugs exclusive of opium. The charge was Rs. 2,78,420 and the cost of opium at Rs. 5-8 a seer was Rs. 4,51,715. The net revenue under this head amounted to Rs. 35,93,769, and the charges amounted to nearly 17 per cent. on the gross collection.

The Sale of Waste Lands by auction in the Darjeeling territory was notified at an upset price of Rs. 10 an acre, and no grant of less than 50 acres was to be sold. The value of *Stationery* supplied during the year was Rs. 41,12,999.

Marine.—The strength of the Pilot Service was

11 Branch Pilots
30 Masters
30 Mates
12 Senior 2nd Mates
12 Junior 2nd Mates
52 Volunteers
<hr/>
147

The number of Licensed Pilots of the service was as follows :

1 Branch Pilot
6 Masters
2 Acting Masters
5 Mates
1 Acting Mate
<hr/>
15

And of Licensed Pilots out of the service as follows :

1 Pensioned Branch Pilot
4 Mate Pilots
<hr/>
5

There were 45 cases of ships grounding in the river against 127 the previous year, and in these blame was attributable to 5 pilots only. There were 14 collisions against 23 the previous year. Eight officers of the Pilot service were brought to trial of whom only one was acquitted. The most remarkable circumstance noticed by the River Surveyor is a general, though gradual, improvement of the channels below Saugor. But some of the channels above Saugor have deteriorated, which frequently causes the detention of the inward bound

Mail Steamer. The Pilotage and General receipts and charges of the Port of Calcutta were :—

Expenditure	Rupees	13,84,230
Receipts	„	11,10,216
Excess of expenditure		Rs. 2,74,014

This is less by Rs. 25,174 than the excess of last year. The moorings were equal to the accommodation of 178 ships. The office of Register of Merchant Seamen was abolished and that of Shipping Master established in its stead. In the Engineer's School there were 21 boys. The Institution continued to be most useful in training Engineers for Government. The Naval Brigades were all paid off. From the absence of conveniences there were no arrivals or departures in the Mutlah.

Public Works were chiefly military. The following is given as an approximate estimate of the expenditure :—

	Rupees.
Military Works	27,60,000
Civil Works	5,10,000
Repairs	12,80,000
Establishment and contingencies ...	11,00,000
Grand total, Rupees ...	56,50,000

The total accommodation for European Troops available in the Lower Provinces (exclusive of Fort William) in July, 1857, and at the present date is briefly set down as follows :—

STATIONS.	No. of Troops for whom accommo- dation is available.					TOTAL.	
	Available on the 1st July 1857.	New accom- modation completed.		New accom- modation in progress.			
		In old Buildings adapted.	In new Buildings constructed.	In old Buildings adapted.	In new Buildings.	Availa- ble.	In progress.
Dum-Dum ...	1,200	960	1,385	...	200	3,545	200
Barrackpore ..	...	...	1,760	...	..	1,760	...
Chinsurah ...	751	...	346	...	...	1,100	...
Ranergunge ...	300	..	1,250	...	250	1,550	250
Hazareebaugh ...	...	100	1,000	...	400	1,100	400
Dinapore ..	1,167	...	1,750	...	...	...	...
Bankeepore ...	...	...	200	...	...	...	...
Darjeeling ...	...	...	1,000	...	...	...	...
2nd Division Grand Trunk Road ...	...	...	2,130	...	...	...	...
Dehree ...	...	...	...	...	1,000	...	1,000
Damudah ...	...	...	...	...	300	...	300
Berhampore ...	800	680	..	...	...	1,480	...
Dacca ...	...	300	..	...	...	300	...
Total ...	4,221	2,040	10,821	...	2,150	17,082	2,150

Note.—The accommodation for one married Soldier is reckoned as equal to that for 4 single men.

The only public works from which remuneration was derived were the Nuddea Rivers, the Calcutta Canals, and the Tolls on

Imperial Roads. Toll bars were established on the several Imperial roads in the vicinity of Calcutta, and the Ferries over the Hooghly at Phulta Ghaut, on the Grand Trunk Road, and the Gowaree and Panglatta Rivers on the Calcutta and Berhampore road were placed under this Department. The amount of tolls collected during the year was:—

On the Mohanuddy River	Rupces	1,97,150
„ the Calcutta Canals	... „	3,06,581

Showing an excess over the year 1858-59 of Rs. 23,386 in the former, and Rs. 34,282 in the latter. The returns of Tolls on the 1st Division Grand Trunk Road show the collections during the year to have been Rs. 12,374. The station of Buxar was transferred from the North-Western Provinces Government to that of Bengal, and the Dinagepore Division, which had become already far too large a charge, was formed into two divisions. The department was allowed to entertain a photographer.

Calcutta Municipal Operations.—See for 1858, page 288, vol. III. of the Annals, and for 1859, page 277, of this volume.

Coolie Emigration.—26,672 souls, of whom 17,342 were men, 6,231 women and 3,099 children, emigrated. Of these 21,392 went to the Mauritius and 5,280 to the West Indies. There returned from the Mauritius 5,069 and from the West Indies 429, or 5,498 in all. The mortality was from 1 to 1½ per cent. on the aggregate. Emigration continued to be most popular. Several re-emigrated. Many returned with large sums of money. The Protector of Emigrants, with the sanction of Government, issued a revised set of rules.

Revenue Survey.—The report of the Professional Survey extends to 30th September 1859. In the 1st Division Mr. Pemberton surveyed an area of 1,603 square miles, containing 388 villages; of this area, 928 square miles belong to the district of Rungpore, and 675 to the independent territory of Cooch Behar, where however the survey was merely topographical. In the 2nd division, Captain J. L. Sherwill, who succeeded Captain Row, surveyed 600 square miles in Dinagepore. Mr. N. F. Davy, in the 3rd division, accomplished 760 square miles, the whole of the field prepared for him in Dacca. This area contained 1,452 villages, of the average size of only 313 acres, or about half a mile each. In the 4th division, Captain Gastrell surveyed 1,300 square miles in Jessore and South Fureedpore, containing 1,981 villages. Mr. O'Donel accomplished 1,470 square miles in Arracan, containing only 110 villages. The greater portion of the circuits consisting of hill and jungle, much sickness was experienced by this party. In the Hazareebaugh division, Cap-

tain Thompson commenced operations in the district only in February last, he surveyed 282 square miles by the close of the field season, containing 240 villages, of the average size of a little more than a mile.

The report of the non-professional branch is to 30th April 1859. Mr. Waterfield, Superintendent of the 1st division, prepared 2,400 square miles in Dinagepore, containing 5,052 villages, for the surveyor. The number of boundary disputes disposed of was 476, and of other cases 1,691. The average expense was Rs. 31-14 per square mile. The registry work of the 2nd division was carried on under the direction of the Collector of Burdwan, and the expenditure incurred on this account was Rupees 3,094-14-8. Mr. Spencer, Superintendent of the 3rd division, demarcated 1,717 square miles in Dacca, containing 5,100 villages; the boundary disputes disposed of rose to the high figure of 3,886, with 7,192 cases of other descriptions. The total expense was Rupees 63,529, giving an average per square mile of Rupees 37 on the entire demarcated area. In the 4th division, the Superintendent, Mr. Watson, demarcated 1,082 square miles in Jessore and South Furdypore, containing 1,344 villages; the boundary disputes disposed of numbered 396, and other cases 4,530. The total expense was Rupees 64,482-5-11, which produces an average rate of Rupees 59-9-6 per square mile.

Medical College Hospitals and Dispensaries.—The average mortality was unusually high, the deaths among the Europeans being 12 per cent. and those among the Natives being 24. Out of the 273 deaths amongst Europeans, 112, or 41 per cent., resulted from cholera, while among Natives from the same cause the mortality was 22 per cent. The mortality from surgical operations in the Hospital was only 2 to 29 cases, or 6·89 per cent. In the male out-door dispensaries of the Hospital, 14,654 patients obtained relief during the year, of whom a considerable number were Europeans, and in the female out-door dispensary 9,352 patients obtained relief. The Eye Infirmary attached to the Medical College had risen in the public estimation; the in-door patients for the year numbered 519, and the out-door 2,251. Patients attended from all parts of the country.

Lunatic Asylums.—Beyond the appointment of a Director General, nothing was done under the new Act. In the Bhowanipore Asylum 95 Europeans and East Indians were treated, and of these 27 were sent to Europe. The cost was Rs. 39,046-6-4.

In the Dullanda Asylum there were 261 natives. The cures were 20 per cent. The cost of each patient a month was Rs. 5-0-3. In the Dacca Asylum there were 178 patients and the ratio of cures was 18 per cent. In the Patna Asylum there were 128 and the cures were numerous. The mortality was below 10 per cent. In the Moorsshedabad Asylum there were 122 patients and the cures averaged 50 per cent.

Political.—The administration of the 16 Tributary Mohals of Cuttack continued to be satisfactory. The demands were Rs. 36,411 and the collections 35,114.

The revenue of the Cossyah and Jynteah Hills was Rs. 23,023. In 1853-54 it was only Rs. 1,047. There were 10 schools with 132 scholars. The value of the trade was estimated at—Exports 7 lakhs, Imports $3\frac{1}{2}$ lakhs of rupees. The average quantity of limestone quarried annually is 17 lakhs of maunds, of which Messrs. Inglis and Co. quarry 15 lakhs. As their monopoly expires in April 1861, the leases of the quarries will then be offered for public competition.

The number of suits decided in Cachar in 1857 was 63, and in miscellaneous cases 607. The increase in land revenue was steady and progressive. A new settlement was made for 20 years. The Assam Civil and Criminal rules were extended to the district. The Superintendent exercises the functions of Civil Judge, Magistrate, Collector, Post Master and Registrar of Deeds. He is assisted by two Moonsiffs. Appeals lie to the Sudder. North Cachar is a sub-division of the district of Nowgong in Assam. It also includes the tract of land known as "Tularam Senaputty's Territory," which was brought under the direct management of a British officer in 1854. The officer in charge is a Junior Assistant Commissioner. The revenue derived from the house, hoe and land taxes, was (in 1857-58) Rs. 6,321. The most difficult part of the duties of the Junior Assistant in North Cachar is to protect the people against the murderous inroads of the warlike and savage tribe of Augami Nagas, located near the eastern frontier of the district. The presence of 150 Kookie families lately settled there has kept off attacks. The people are no longer required to supply the troops with provisions. They do not value education.

The revenue and expenditure of Bengal is seen in the following comparative table :—

*Revenue of the Divisions under the Lieutenant Governor of
Bengal for the years 1856-57, 1857-58, and
1858-59.*

	1856-57.	1857-58.	1858-59.
REVENUE ORDINARY.			
Land Revenue ...	3,65,04,635 0 0	3,69,16,953 0 0	3,72,12,820 0 0
Excise and Stamps ...	58,69,147 0 0	57,52,229 0 0	63,88,535 0 0
Post Office ...	6,27,667 0 0	9,81,389 0 0	11,27,564 0 0
Public Works ...	13,80,504 0 0	14,43,736 0 0	15,13,875 0 0
Customs and Salt ...	2,51,88,665 0 0	2,32,52,438 0 0	2,80,05,809 0 0
Opium ...	3,52,59,787 0 0	5,21,19,833 0 0	4,66,61,652 0 0
Marine ...	8,13,594 0 0	6,63,832 0 0	6,38,324 0 0
Miscellaneous ...	9,13,625 0 0	10,16,142 0 0	12,27,606 0 0
Sayer ...	2,96,311 0 0	2,97,807 0 0	3,73,279 0 0
Total Rupees ...	10,98,53,935 0 0	12,24,44,359 0 0	12,31,49,464 0 0
EXTRAORDINARY.			
Miscellaneous including Public Works ...	5,24,115 0 0	9,40,500 0 0	8,46,989 0 0
LOCAL FUNDS, &c.			
Convict Labor Fund	1,00,421 0 0	59,314 0 0	1,05,940 0 0
Miscellaneous ...	3,21,697 0 0	2,75,964 0 0	3,95,695 0 0
Total Funds ...	4,22,118 0 0	3,35,278 0 0	5,01,635 0 0
Grand Total ...	11,08,00,168 0 0	12,37,20,137 0 0	12,44,98,088 0 0

*Expenditure of the Divisions under the Lieutenant Governor of
Bengal for the years 1856-57, 1857-58, and
1858-59.*

	1856-57.	1857-58.	1858-59.
EXPENDITURE ORDINARY.			
General Department ..	21,73,421 0 0	25,11,933 0 0	27,91,518 0 0
Post Office	8,12,941 0 0	10,20,917 0 0	10,28,145 0 0
Public Instruction ...	9,73,493 0 0	10,33,511 0 0	10,33,173 0 0
Pensions	17,51,515 0 0	18,07,825 0 0	18,12,251 0 0
Judicial Department ..	69,16,980 0 0	70,93,939 0 0	71,53,391 0 0
Revenue Department ..	31,55,550 0 0	32,10,966 0 0	31,06,516 0 0
Excise and Stamps ...	4,45,173 0 0	4,12,890 0 0	4,09,094 0 0
Customs and Salt ..	17,61,163 0 0	42,91,962 0 0	45,37,954 0 0
Public Works	27,22,925 0 0	22,35,257 0 0	37,62,652 0 0
Sayer	350 0 0	1,594 0 0	1,118 0 0
Miscellaneous General ..	1,18,256 0 0	1,38,291 0 0	1,43,581 0 0
Opium	1,12,89,258 0 0	89,06,180 0 0	76,93,580 0 0
Marine	27,91,770 0 0	37,05,809 0 0	40,67,328 0 0
Total Rupees ...	3,82,12,825 0 0	3,64,01,077 0 0	3,75,40,631 0 0
EXTRAORDINARY.			
Public Works	14,72,605 0 0	28,06,615 0 0	39,88,828 0 0
Miscellaneous	1,87,189 0 0	5,30,171 0 0	1,70,023 0 0
Total Extraordinary	16,59,794 0 0	33,36,816 0 0	41,58,851 0 0
LOCAL FUNDS, &c.			
Convict Labor Fund ..	1,14,547 0 0	56,458 0 0	64,113 0 0
Miscellaneous	2,87,668 0 0	2,05,701 0 0	3,22,750 0 0
Total Funds	4,02,215 0 0	2,62,159 0 0	3,96,863 0 0
Grand Total	4,02,74,834 0 0	4,00,00,052 0 0	4,20,96,345 0 0
Surplus or Remainder ...	7,05,25,334 0 0	8,37,20,085 0 0	8,24,01,743 0 0

ADMINISTRATION OF THE HYDERABAD ASSIGNED TERRITORIES.

1858-59.

LIEUTENANT Colonel C. Davidson, the Resident at Hyderabad, reports that for the first time the British system of administration was fully introduced. The people unmistakeably shewed their appreciation of the advantages of our rule, notwithstanding the apprehension excited by the rumours of their being restored to the direct Government of the Nizam. A light and liberal assessment of the land permitted an increase of revenue in all the districts.

Civil Justice.—The last Moonsiff's Court was abolished and the number of Subordinate Courts reduced from 48 to 43, which increased the average jurisdiction from $634\frac{1}{2}$ square miles to $650\frac{3}{4}$. There were 7 European and 7 native Assistants. Appellate power was limited to Commissioners, Deputy Commissioners, and such Assistant Commissioners as were in charge of districts. The number of civil cases filed during the year was 5,382, of which 71 were before the Deputy Commissioners, 243 before the Assistant Commissioners and 5,068 in the Small Cause Courts. The number of cases pending at the close of the year was 44, 55 and 1,197 respectively, or 1,296 in all. The total number of cases for disposal was 6,944, of these 2,763 were decreed, of which 1,982 were in favour of the Plaintiff and 781 in favour of the Defendant; 1,849 were settled by mutual agreement, of which 1,657 were in favour of plaintiff and 192 of the defendant; 732 were withdrawn and 304 transferred. The value of property litigated was Rs. 7,30,456, and the average value of each suit 103-14-8. The proportion of suits to the population was 1 to 303 in 1857, but 1 to 326 in 1858. The average cost in each case was in 1857 Rs. 3-11-1 in 1858 Rs. 3-7-2. The number of Civil debtors in confinement was 102.

Of *Criminal* cases there were 6,767 involving 10,544 prisoners. Of these 2,642 were grave and 4,007 petty offences. Of these 10,544 prisoners, 7,273 were punished, 3,028 convicted, 101 transferred, 18 deserted, 5 died and 119 remained under trial. There were 19 cases of crimes of murder and the same class, and 31 of Gang robbery, wounding, rape, &c. The estimated amount stolen was Rs. 1,06,820, of which $12\frac{1}{2}$ per cent. was recovered. The quantity of recovered property diminishes yearly, owing to less vigilance probably on the part of the Police. Criminal Justice is administered in the Assigned Districts according to Beaufort's Digest.

Police.—The strength of the Police was 2,139 costing Rs. 1,86,129, being a percentage of 1 peon to every 1,358½ of the population. The number of village watchmen was 1,08,694 and of other village servants 8,891 in 3,716 villages, costing Rs. 2,23,711. The number of police in 90 towns was 102 officers and 830 peons costing Rs. 41,562. Of the four districts of Dharaseo, Raichore, East and West Berar, crime is very frequent only in the two last. Besides the above Police are the Hill Rangers, a body of military police, and the Frontier Chowkedaree Police. The daily average number of prisoners in the jails was 317 and the total jail expenditure Rs. 57,864.

Revenue.—The system is Ryotwar Assessment with village management. Settlements for 4 or 5 years instead of an annual Jummadundy are proposed. The total revenue in the year shows an increase over 1857-58 of Rs. 2,47,500.

	1857-58.			1858-59.		
Land Revenue	41,98,043	11	9	43,80,584	6	10
Abkarree, Opium, and Drugs	2,65,980	6	6	3,15,262	14	0
Salt wells	32,458	4	2	19,609	5	9
Saltpetre Beds	1,608	0	0	1,748	0	0
Road Cess	39,953	8	2	45,301	11	6
Town duty	38,281	14	0	68,646	12	11
Judicial Stamps	32,769	11	2	26,893	10	9
Judicial and Revenue Fines	26,277	7	4	24,171	7	9
Miscellaneous Items ...	36,720	6	10	36,019	7	8
Sayer	875	8	3	896	13	6
Ferry Fund	5,798	9	9	7,133	4	11
Total ...	46,78,767	7	11	49,26,267	15	7

Though transit duties are partially levied in the Nizam's territories, they were abolished in ours. The Enam Commission decided 301 money claims amounting to Rs. 20,506; out of this number 77 claims, being equal to Rupees 6,041-14, were con-

firmed for life; 5 claims, being equal to Rupees 672-6-4, were confirmed conditionally on service; 2 claims, equivalent to Rupees 432, were confirmed in perpetuity; and 217, equivalent to Rupees 13,360-2-0, were disallowed. The number of land claims was 222, and of these 13 were decided. According to the Register there are 416 integral villages, with an area of 3,52,000 acres, and a Revenue of Rupees 2,16,515 per annum remaining for investigation and final decision by the Government.

Education.—At Hyderabad there is a Protestant School attended by 51 European and East Indian boys and girls. At Secunderabad there is a school for the reception of the children of Warrant Officers, Artificers, and Drummers, and of the few non-Military families residing at the Station. Cantonment schools were established in 1842, and have ever since been supported by voluntary contribution with varied success. An orphanage was added in April last, and supports nine boys and eight girls, ten of whom are boarders. At Bolarum there is a good English boys' school, of which Mr. Samuel Lee is the master; there is also a girls' school: the number of pupils attending both of these is 78, viz., 32 boys and 46 girls. Besides these there are 9 schools, 1 at Bolarum and 8 at Secunderabad taught by a Church of England Missionary. In the Roman Catholic schools there are 135 children. In Hyderabad there is an English class for natives in the Minister's College, and the Medical School under Dr. Smith, Residency Surgeon.

Public Works consisted of only the building of public offices and a road between Hyderabad and Sholapore. By this road, to be completed in November 1859, troops can be pushed forward from Poona and Sholapore to Hyderabad in 8 or 10 days at the rate of 100 a day. The Canal connecting the Moosay and Secunderabad tank was ready. It is 31 miles in length. The total expenditure in this department was Rs. 3,99,434. To feed the railway from Oomraotee to Nagpore the District Officers of Berar were instructed to throw open roads on both sides of the valley. The Electric Telegraph crosses the Assigned Districts at only one point in the Raichore Doab. As the late Nizam died soon after it was established, his successor and the natives have a superstitious dread of it.

Finance.—The total receipts, including arrears of former years, were Rupees 50,45,142-9-9; and disbursements in salaries in the Districts Rupees 1,32,599-10-10; and in Establishments of all kinds, Rupees 5,07,899-9-6; Contingencies, Rs. 2,41,424-5-10; Miscellaneous advances, Rupees 8,58,192-7-0; Survey, Rupees 13,000, and Department of Public Works, Rupees 54,000; making a total of Rupees 18,07,116-1-2, including salaries. The ex-

penditure under the head of local funds was Rupees 74,545-10-11, which being added to the previous items, makes a total of Civil expenditure of Rupees 18,81,661-12-1, leaving a balance in favor of receipts for general purposes of Rupee 31,63,480 13-8.

Political.—To review the political events at Hyderabad freely and impartially, might give umbrage to the Nizam, who proved himself a faithful ally, the mutiny at Aurungabad, the attack on the Residency, the rebellious risings at Shorapoor and Copal, the proposed invasion of the Deccan by Tantia Topce and the Rao Sahib, and the insurrection of the Arabs and Rohillas, when Risode and Nelingah in the Assigned Districts were plundered, were each and all promptly met by British Troops and suppressed with equal determination, energy, and success. Had a general Mahratta movement taken place, it would have at once enlisted on our side the old hereditary and ever cherished “Moglaicc” animosity against their former and national foe, the Mahrattas, and there is no doubt the Nizam and his own immediate men would have been easily induced to take the field in our favor on such an event and in such a cause. Half the Contingent distinguished itself under Sir Hugh Rose, and at the battle of Banda under Sir George Whitlock. The Assigned Districts maintained profound peace, and the people freely supplied our troops with provisions. That a principality under a native Government, containing a population of ten millions, the adult part of which all go armed, remained quiet, cannot in a political point of view, be too highly appreciated.

The *Population* returns are given as :—

West Berar, ...	...	...	...	5,57,630
East Berar, ...	...	...	...	5,91,525
Dharaseo District, ...	...	...	...	3,22,379
Raichore Doab, ...	...	...	...	5,43,113

Total ... 20,17,647

It is believed that emigration is in favor of the districts.

The Revenue *Survey* is conducted on the Bombay plan. In Raichore and Dharaseo 2,73,713 acres were surveyed. The total number vaccinated in the Hyderabad Assigned Districts from 1st May 1857, to 30th April 1858, was 3,027, with 19 as the percentage of failures; the present report shows a total of 30,063, with a ratio per cent. of 10 failures. The total number vaccinated at the Presidency Dispensary amounts to 1421, with a percentage of 3 failures. The Sanitary Stations at Dharaseo, Lingsoogoor, and Oomraotee were nearly completed. Akola had been fixed on for West Berar. Mr. Whitlock, the Officiating Chief Commissioner is thanked for his unwearied zeal, industry and ability.

THE
ANNALS
OF
INDIAN ADMINISTRATION.



EDITED BY

MEREDITH TOWNSEND.

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1858.

ADVERTISEMENT.

THE Governments of India publish on an average a volume every four days. From Reports affecting the entire Empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha bye-road in a frontier province, every thing finds a place in these publications. There is scarcely a subject connected with Indian Administration on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is, however, widely scattered. The Records of one Presidency are scarcely known in another. The books are not very readily procurable, and above all they are like all other blue books dry, ill-digested, and overlaid with detail. It costs an hour to find a fact, and in India men who care about facts cannot spare hours.

The object of the Compiler is to remove this defect, to do for the official information of India what Mr. Leone Levi is doing for the Blue Books of England. The Annals will comprise every fact, and almost every opinion of importance in the records of the Quarter. A copious Index will enable the reader instantly to refer to the subject of which he is in search, and any peculiarity of opinion and even of style is carefully retained.

A word may be necessary on the arrangement adopted. It is intended that the most important subject should have the largest space, but in estimating the relative importance of the records the Compiler has been compelled to rely on his own judgment. Usually all subjects of imperial interest have the preference, statistics occupy the next place, and subjects purely historical the last. They are not very important, and not at all interesting, but they can only be condensed to a certain point. The present Number contains in fact two Numbers, the Mutinies having for a time made it impossible to collect books in September.

THE
ANNALS
OF
INDIAN ADMINISTRATION.

TEA CULTIVATION.

India Records, No. XXIII.

BHURTPUR, one of the Kumaon Plantations is situated "eight or ten miles to the Eastward of Naince Tal, and is at an elevation of about 4,500 feet above the level of the Sea. It consists of a succession of terraces reaching from the bottom to the top of a small Hill; the soil is composed of light loam mixed with small pieces of clay-slate and trap or green stone, of which the adjacent rocks are chiefly composed." It is about six acres in extent and in high condition. A large tract of land has been set apart in the adjoining hills for its extension, a portion of which has been already cleared. Generally in Mr. Fortune's opinion the land on the estate is unequal, and he would propose that the more favourable spots should be selected at first for the cultivation. The Plantations of Lutchmesir and Kuppeena "are on a Hill side near Almorah, about 5,000 feet above the level of the Sea, and together cover about seven acres of land." The soil is well adapted for Tea, and the bushes in good condition. Kuppeena is perhaps the best, as many of the plants in Lutchmesir appear to be getting old. Hawulbaugh and Chullar "are situated about six miles North-West from Almorah, at an elevation of 4,500 feet above the Sea. In 1854, Dr. Jameson states that Hawulbaugh covered fifteen acres, and Chullar thirty." The former has some excellent land, but the forest and fruit trees though they look pretty injure the Tea. They should be cleared away. The young plants moreover appear to have been planted somewhat carelessly. The mode of gathering the leaves also requires improvement. At present too many leaves are taken away from the plants, which has the effect of stunting them. The Kutypoor estate is a large tract of land which "has been

taken up near the head of the Byznath Valley, about thirty-five miles Northward from Almorah." A considerable portion of the tract is well adapted for Tea, but some of it is much too wet.

The Gurhwal Plantation "is in Eastern Gurhwal, near the village of Paorie, in Latitude 30° 8' North, and Longitude 78° 45' East. It consists of a large tract of terraced land extending from a ravine in the bottom of a valley to more than 1,000 feet up the sides of the mountain. The lower portion of this land is said to be about 4,300 feet above the Sea, while the top of the surrounding mountains are from 7,000 to 8,000 feet." Part of this Plantation only is well adapted to the cultivation, and some thin stony land appears to have been planted within the last few years. On the good land the plants are succeeding very well, but on the whole Mr. Fortune was disappointed in the Plantation. The expediency of carrying the Plantation higher up the mountain seems very doubtful. The bushes look as if they wanted more heat.

The Deyrah Dhoon Farm. In 1850 Mr. Fortune found this Farm anything but flourishing. In consequence of his suggestions the system of cultivation was changed, the trenches were filled up, irrigation was discontinued, and more judgment was exercised in gathering leaves from young plants. The result has been most satisfactory. The supply of labour is deficient, and only a portion can be said to be under cultivation. Mr. Fortune has seen no finer Plantations in China. The plants are in high health, large and bushy, and yield annually large crops of leaves. It is not, however, expedient to plant on land but half ready.

The Punjaub Plantations. The Nagrowta Farm "is situated in the Kangra Valley about nine miles from the Old Fort, and covers apparently about five acres of land. It was planted in 1847, and consequently has been in full bearing for several years. In 1855 it produced 1427 lbs. of Tea, or about 330 lbs. per acre. The soil is a brownish loam, moderately rich in vegetable matter, and well suited for Tea cultivation. The plants are healthy and vigorous." The Bowarnah Farm "is another small experimental Plantation further to the Eastward in the same valley, and about twenty miles from Kangra. It appears to be five or six acres in extent, and was planted about the same time as the former." It yields upwards of 300 lbs. per acre. The soil is a brown loam very well suited for the cultivation. The Holta Farm "is about 26 miles North-East from Kangra, at the foot of the high mountain range, and nearly 4,000 feet above the level of the Sea. Here snow falls annually and covers the ground for several days at one time. The high

mountains behind are white with snow for the greater part of the year.

"The extent of this Plantation is stated to be about 1,200 acres, and of these 700 are already under cultivation. About 20 acres were planted in January, 1852, 300 in 1853-54, and 380 in 1855-56." The soil is a yellow clay with a surface rich in vegetable matter. It is admirably adapted for Tea cultivation. The plants are healthy, vigorous, and full-bearing, and irrigation has been avoided with most satisfactory results. Too many leaves however are plucked off, young as well as old, a matter of considerable importance.

Mr. Fortune considers that the Himalayas are excellently adapted to the cultivation of Tea, but some knowledge of the plant and of horticulture is required to make success certain. It is a great mistake to suppose that Tea will grow on land too poor for anything else. Tea in order to be profitable requires a good sound soil, a light loam well mixed with sand and vegetable matter, moderately moist, and yet not stagnant or sour. There is no scarcity of such land in the Himalayas. The leaves even from full grown plants should not be plucked too freely, a point to be carefully impressed upon the natives. The natives "instead of nipping off the upper part of the young shoot with its leaves, as the Chinese do, strip the leaves from it and leave the bare stems. These bare stems generally die down to the nearest leaves, and then the plants get covered with dead stems and present a sickly appearance. About an inch and a half, and sometimes more of the top of the young shoots is soft and succulent, and makes just as good Tea as the leaves themselves. The Chinese know this well, and hence they always nip off this portion with the leaves." Very few of the old tough leaves should be plucked. They are worthless for the market, and invaluable for the health of the plant. The Chinese tea-growers on the Plantations should instruct the natives in the art of Tea plucking. The Tea originally procured had an "Ankoy" flavour which was objectionable. Mr. Fortune however had sent round twenty-five makers from the best districts in China, and already a marked improvement has taken place in the appearance of the Himalayan Teas. The thousands of Tea plants sent round should not be mixed up with the original plants, in order to detect whether the peculiar flavour of the Himalayan Teas is inherent, or caused by bad manipulation.

To cultivate Tea a large amount of capital is required. "It is true that a man with small capital, and having the requisite amount of knowledge—if content with a moderate, or even handsome and certain remuneration for his outlay and labour—might succeed and gain a comfortable living by the cultivation

of Tea on the Himalayas." A large public company is more likely to succeed than private capitalists "I would strongly advise Government not only to discourage but to take measures to prevent, mere adventurers from getting up a company of this kind,—men who have no other object in view than power and place, and who would probably in the end bring ruin upon the shareholders, and give a check to Tea cultivation in these Provinces, which it would take many years to recover." The size of the buildings and number of tea-makers should be immediately increased. The Zemindars who it was hoped would take to the cultivation have not done so. In one instance two small Farms of eight acres together were given to a Zemindar about thirty-five miles from Almorah. A Government factory where his leaves were purchased at Rs. 8 a maund was within three miles of his Farm. "The circumstances in which this man was placed were altogether most favourable. Supposing the land to have been, yielding annually 800 lbs. of raw leaves per acre, which is a very low average, he would have been realizing Rupees 80 an acre for his land, or Rupees 640 for the 8 acres under Tea—a sum I should imagine twice as large as he would make from any other crop and with less trouble." The man when Mr. Fortune visited the place was cultivating rice above the Tea. Another Plantation in Hawulbaugh belonging to Captain Ramsay is in good order, and in two years will produce large quantities of Tea and keep on producing for many years. The Zemindars, however, must ultimately take to the cultivation, and the quantities of foreign capital thus introduced must be of material benefit to the cultivators. Another great benefit of the cultivation is that even in the driest weather there is always a crop. On one occasion when nearly every other crop had failed the Tea seemed quite uninjured.

The following is Mr. Fortune's estimate of the return to be expected from a great Tea estate. A little one will not be profitable in the same proportion, while in a larger one the proportion of profit will again increase :—

ROUGH SKETCH of the Quantity of Land which could be brought under Tea Cultivation, with a Capital of Rupees 2,00,000, and also intended to show the probable amount of Expenditure and Profits spread over a space of six and eight years.
1,800 ACRES OF LAND.

<i>Expenditure from the 1st to the 6th year inclusive.</i>		<i>Income from the 3rd to the 8th year inclusive.</i>	
	Rupees		Rupees
Factory and houses for Tea-makers, Bengalow for Overseer,	6,000	Tea manufactured in the 3rd year, say 10 lbs. per acre, at 8 {	9,000
Pay of Overseer, at 100 Rupees per month, for 6 years,	1,400	ditto in the 4th year " 30 lbs. " at ditto, ...	27,000
Ditto of 500 men, at 4 Rupees per month, for 6 years,	7,200	ditto in the 5th year " 80 lbs. " at ditto, ...	72,000
Ditto of 10 Chowdries, at 8 Rupees per month, for 6 years,	1,44,000	ditto in the 6th year " 120 lbs. " at ditto, ...	1,08,000
Ditto of 1 Moonshiee, at 12 Rupees per month, and 2 Chup-rassies, at 5 Rupees per month, for 6 years,	5,760	ditto in the 7th year " 150 lbs. " at ditto, ...	1,35,000
Rent of Land for 6 years, at 1,350 Rupees per annum,	1,584	ditto in the 8th year " 200 lbs. " at ditto, ...	1,80,000
Expense of preparing Tea, in 3rd, 4th, 5th and 6th years, say 20 men, at 5 Rupees per month,	8,100		
Four Chinese Tea manufacturers, at 34 Rupees per month, for 4 years,	4,800	Total in the 8th year, ...	5,31,000
Implements, passage money for manufacturers, carriage, &c., say,	6,528	Deduct amount supposed to be expended in 6 years, ...	2,98,612
Contingencies for 6 years, say 1,000 Rupees per annum,	8,628	* Profits,	Rupees 2,62,388
	6,000		

* There would be sundry expenses deducted from this sum, such, for example, as interest of capital for the first 6 years, auctioneers' fees, carriage, &c., if the Teas were sold in India : and cartage, freight, and other shipping charges if exported to Europe and America, or the Colonies. I have put down the pay of the Overseer at Rupees 100 per mensem, as that is the sum at present paid by Government ; but it would probably be necessary to raise that to Rupees 300 if a good man could be procured. I have supposed the whole of the 1,800 acres to be planted in one year ; but this would probably be impossible, as it would take some time to select the land, and the requisite number of plants might not be procurable at once. In this case, however, the expense for labour would be proportionably less.

<i>Working Expenses in the 7th and 8th year.</i>		Rupees 2,00,000
Overseer's pay for 2 years,	2,400	
500 men for ditto,	48,000	
10 Chowdries for ditto,	1,920	
1 Moonshiee and 2 Chuprassies for ditto,	528	
Rent of Land for ditto,	2,700	
Expense of preparing Tea doubled, say,	4,300	
Wages of 4 Chinese for 2 years,	3,264	
Contingencies for wear and tear of implements, boxes, &c., in 2 years,	5,000	
	Rupees 68,612	68,612
Total ..	Rupees 2,68,612	

R. FORTUNE.

On 17th November, 1856, Dr. Jameson reports that Mr. Fortune's suggestions are not original, and have long since been carried out. They will all be found in the Notes prepared for the benefit of Overseers.

1. On suitable ground. "Care must be taken to chose only well drained land, not dry, stiff clayey land, in which nothing will grow, but land rather moist, in which the soil is light or free. All low places, where rain water rests, must be avoided such as the lowest part of valleys, &c." Tea can be mixed with dry crops, but not with rice, as the water necessary for the rice spoils the Tea.

2. On preparation of the ground. "Before sowing Tea seeds let the land be well ploughed or trenched with the phaoorah to the depth of 18 or 24 inches, and all the weeds removed; and let it be well manured to the extent of 60 to 70 maunds per acre if manure be plentiful. If not, a much smaller quantity will do. Let it then be smoothed and thrown into beds, it will then be ready for seeds and plants."

3. On the method of sowing seeds and on the treatment of young plants. Tea seeds ripen in October and should be sown soon after. Sow them very close to a depth of one inch in drills 8 inches apart. Water them sparingly, "which need not be again repeated until the seedlings begin to show themselves above ground, after which time let them be watered every six or seven days." The seed beds ought to be weeded three or four times during the season.

4. Method of transplanting. "As soon as the seedling plants are 8 inches in height, they are fit for transplanting, and in doing so they ought to be planted $4\frac{1}{2}$ feet apart. Let holes be dug to the depth of $1\frac{1}{2}$ feet or more if necessary. In lifting, therefore, the plants to be transplanted, the ground ought to be well opened up, and if possible each plant lifted with a small ball of earth attached to the roots. Let the earth be then well pressed down with the foot at the roots, and watered. If manure be available, a small quantity ought to be put into each hole." Transplanting should begin with the rains and continue through them.

5. On plucking. The season for gathering leaves commences in April and continues till October. The leaves should not be pulled till the plants are three years old. Only the fresh and young leaves should be plucked. During the season four gatherings may be taken from the same plant. In the second year the terminal shoots ought to be pinched off to induce the plant to take a bushy form. This should be done two or three times during the season. "To Zemindars desirous of undertaking Tea cultivation, plants and seeds in any number

and quantity will be issued from the Government Plantations at Hawulbaugh, Bheemtah in Kumaon, and at Boru in Gurhwal. All Tea leaves brought to the factories in good order will be purchased at the rate of 8 Rupees per maund and to the first party who brings leaves the following rewards will be given.

“The first party who brings pukka 100 maunds of good fresh leaves will receive Rupees 300. The first party who brings 50 maunds, Rupees 100. The first party who brings 25 maunds Rupees 50. The first five parties who bring 12 maunds Rupees 30 each. The first ten parties who bring 10 maunds Rupees 20 each. Each party must show that the leaves brought have been gathered from different Plantations.”

Dr. Jameson enters into a defence of the coarse Teas said by Mr. Fortune to be too largely produced at the factories. It is his object to reduce the quantity, but the price though low is remunerative, and the coarse Tea eagerly purchased by the natives. Dr. Jameson proves that Plantations formerly condemned by Mr. Fortune now satisfy him, and adds that the extra room required has been given, while the stunted look of the plant of some Plantations is owing to the drought for three successive years. The Chullar land said to be thin and stony was only taken because there was no other, and the Tea plants from China are most carefully kept distinct. Two native Plantations are in good order, and the Zemindar specially mentioned in Mr. Fortune's report is aware of his blunder in suffering rice to be grown above the Tea, and means to repair it. The proprietor however did receive Rs. 152 for his Tea last season, while the rent of his entire estate, covering many square miles, is only Rs. 40. Several Europeans moreover have opened Plantations. Col. Elwall and Capt. Thulwell opened a large Plantation in Deyrah Dhoon with complete success. “In the Simla District, Mr. Purkely has commenced Tea planting, and has been liberally supplied with plants and seeds. In Assam Mr. Carnegie has established himself as a Tea-planter in a Government grant, and been liberally supplied with seeds. The Assam Company, anxious to improve their Tea Plantations by introducing Kumaon seeds, have also been liberally supplied. In Cachar several Calcutta firms have taken up Government grants for the purpose of cultivating Tea, represented by Mr. Bugby, Mr. Saunders, Mr. Schiller, all, of whom have been or are being supplied with seeds. At Darjeeling several parties have taken up grants and have there commenced Tea cultivation, and I believe there are upwards of 10,000 acres of good land available for the purpose. Into the Cashmere valley the Tea plant is being introduced by the Maharajah Golaub Sing, I, at the request of His Highness, through the Commissioner

any year, or of any of the above conditions (the fact of which failure shall, after local enquiry, conducted by the Senior Assistant Commissioner, be finally determined by the Sudder Board of Revenue) the entire grant shall be liable to resumption at the discretion of Government, with exception of the assessable area which may be *bona fide* under cultivation with Tea, and to a further portion of land which shall be allowed in perpetuity, free of assessment to the extent of one-fourth of such cultivated area. The portions so exempted will remain in the possession of the grantee subject to the usual rates and rules of assessment in the District.

“Grantees shall be bound to erect boundary pillars at convenient points round the circuit of a grant, within six months from its date, failing which such pillars will be put up by the Government Officers, and the cost thereof shall be recoverable from the grantee in the same manner as the regulated rate of assessment.

“No claim to the right and interest in a grant on any transfer by the original grantee will be recognized as valid, unless on registry of the name of the transferee in the office of the Senior Assistant Commissioner.

“So long as Government establishments for the experimental growth and manufacture of Tea shall be maintained in the Province, supplies of seeds and plants will be given gratis to grantees, on application to the Superintendent, Botanical Gardens, North-Western Provinces, as far as may be in his power.” Thermometric tables are appended. It is added that the Tea planter must be continually among his men, and the peculiar diseases of the spot are few. Small-pox rages occasionally, and goitre is very common, but yields to iodine.

The cost of a factory will depend on its size but the land required for a Plantation of 1,500 acres will cost about Rs. 2,500 in the hills or 3,500 in Deyrah. The expense of a thousand acres for eight years would be Rs. 2,75,000, the profit Rs. 1,67,972.”

STATISTICS OF 24-PERGUNNAHS.

THE 24-Pergunnahs lie between 22° and 23° of North Latitude and 88° and 89° of East Longitude. The name arises from the fact that the territory originally ceded to the Company really contained twenty-four pergunnahs. The estate was made over to Col. Clive by Duffer Ali, in 1759, and the rent Rs. 2,22,000 was paid to him till his death in 1774. It then reverted to the Company. The area was then supposed to be 4882 square miles. In 1759

the Company sold them by auction for Sa. Rs. 7,65,700 a year, reserving the royalties worth Rs. 1,50,000 more. In 1820,23 the pergunnahs now forming the Baraset district were incorporated with the 24-Pergunnahs, which is now bounded on the North by Nuddeah, on the East by Jessore, on the South by the Sunderbunds and on the West by the Hooghly. Its extreme breadth from North to South is 71 miles, and its extreme breadth 78 miles, the superficial area being 2277 miles. The whole district is flat, full of Jheels one of which the Boyrah covers 40 square miles, and intersected by innumerable khals or tidal creeks. "In the Western and Southern portions, an embankment has been raised by the Government, commencing from the Muneekhalee Khal, a little below Akra Farm, and extending along the bank of the River Hooghly as far South as the Cheeta-mooree Telegraph, thence along the borders of the Soonderbund jungle, till it meets the Biddiaduree River, running along its right bank and terminating about four miles to the East of the Dhaupa Toll House." The Northern portion is very rich, but the Southern is spoiled by the Salt water. In the North-East immense numbers of date trees flourish without any cultivation.

The principal rivers are "the Hooghly, the Biddiaduree, the Pialec, the Jaboonah or Echamuttee, the Khalindee, the Culputooa, and the Cobbaduk." The Hooghly is navigable up to Calcutta, a distance of 100 miles, for ships of large tonnage. There is one passage which under various names connects several streams leading through the whole district in an easterly direction. There is also another passage from Joynuggur in Pergunnah Boreedhattee.

The principal roads are the Grand Trunk Road running through Barrackpore to the North-West, the road from Calcutta to Diamond Harbour, from Calcutta to Midnapore, from Calcutta to Joyepore, from Calcutta to Baraset. These roads are metalled. The principal secondary roads are "the road leading from Barrackpore to Baraset, and continuing on to Baseerhaut, Soladanah, with a branch to Hurwa and Takee on the Jaboonah River.

"The road from Nychatee, nearly opposite Chinsurah and Hooghly, leading partly through the Nuddeah District and leading to Badooreah (where a branch joints No. 1 to Baseerhaut) on the Jaboonah River, which it crosses by a ferry continued on through Poora Boikari, joined at Ootur Franshuhur, by a road coming from Kullarahaut in District Nuddeah and from thence branches off into three roads, one leading to Boyrah and Parooleah, another to Shatkira, Dhoolihaut, Chandpoor and Paithullec, and the third to Shorooleer and Sakduh on the Cobbaduk River." Many of these are mere tracks, and there

are points of the district in which there are no means of communication except the tidal khals. The South of Calcutta indeed during the rainy season is a vast lake, traversed by "Saltees," boats made of the trunk of a sal tree. "The climate is that of Bengal generally, healthy and unhealthy according to the season. The year is divided into three seasons—the hot, rainy and cold. The hot season commences from the middle of March and ends about the middle of June, or as soon as the first rains set in. The rainy season continues till the end of September and sometimes runs into October. The remainder of the year constitutes the cold weather." The hot season begins with the change of the monsoon. In the latter part of March, April and part of May the heat is relieved by the North-Westers, storms of wind accompanied by lightning and rain. Though the heat by day is excessive the nights are comparatively cool. In July and August heavy rains fall and it is not till October that the rain gradually ceases, and the weather becomes cool and agreeable. "The population of this District is 9,47,204 souls, the details of which are :—

Men, ...	3,50,466	} Exclusive of the City of Calcutta and suburbs.
Women, ..	3,12,578	
Boys, ...	1,61,026	
Girls, ...	1,23,134	
<hr/>		
Total, ...	9,47,204	
<hr/>		

"Of these, in the Allipoor Division of the District, the Hindoos are about 3 to 1 of the Mussulmen. In the Baraset Division the Mussulmen are about equal, or a fraction more than the Hindoos. The average per square mile is 421 and per house 5,40." The population of Calcutta is about 3,61,369 and Major Smyth gives the population and area of each Pergunnah. The population appears to have increased from 267 per square mile in 1822 to 421 per square mile in 1856. This indicates prosperity, but the prosperity is confined to the zemindars as rents and leases are insecure. The people are however contented with little, and their character may be summed up as Rammohun Roy summed it "the peasants or villagers, who reside at a distance from large towns and head stations and courts of law, are as innocent, temperate, and moral in their conduct as the people of any country whatsoever. The virtues of this class, however, rest at present chiefly on their primitive simplicity, and a strong religious feeling, which leads them to expect reward or punishment for their good or bad conduct, not only in the next world but, like the ancient Jews, also in this ; *secondly*, the inhabitants

of the cities, towns or stations, who have much intercourse with persons employed about the courts of law, by zemindars, &c., and with foreigners and others in a different state of civilization, generally imbibe their habits and opinions—hence their religious opinions are shaken without any other principles being implanted to supply their place—consequently, a great portion of these are far inferior in point of character to the former class, and are very often even made tools of in the nefarious work of perjury and forgery; *thirdly*, a third class consists of persons who are in the employ of zemindars, or dependant for subsistence on the courts of law, as attorney's clerks, and who must rely for a livelihood on their shrewdness, not having generally sufficient means to enter into commerce or business." The want of annual food and very early marriage debilitate the Hindoo. The Mahomedan living more freely has a higher physique. Their habitations are usually of mud; sometimes of brushwood plastered with mud. These huts have no windows or apertures except the doorway, the smoke escaping through the space between the wall and the roof. The houses are shrouded in jungle usually productive, and considered by the Bengalee necessary to keep off the sun and his neighbour's eyes. Each house has a patch of ground in which a few vegetables are reared, and these with rice form the staple food. Occasionally the Bengalee eats a little putrid fish. The Mahomedan however affords himself fowl, kid or pigeon. "Their dress usually consists of a turban, a cloth fastened round the loins, and falling as low down as the knee; over this the better classes wear a long robe of cotton, with a white scarf tied round the waist, the end being thrown over the shoulder. The Mussulman wears a pair of cotton drawers, white and sometimes colored, down to the ankles—a robe of cotton, which, to distinguish him from the Hindoo, he buttons on the left shoulder, the Hindoo fastening it on the right—and a turban on the head." The ryot wears a rag for decency's sake, and sometimes a conical hat made of palm leaves. "The dress of the females is very elegant. The close part of the Hindoo female dress is a jacket with half sleeves, which fits tight to the shape, and covers, but does not conceal the bust. The remainder of the dress consists of a long piece of cotton or silk which is wrapped round the middle, and contrived to fall in graceful folds, till it be below the ankle on one leg, while it shows a part of the other. It is gathered into a bunch in front, and the upper end crosses the breast, and is thrown forward again over the shoulder or over the head like a veil. The hands and feet are usually adorned with ornaments, and sometimes a jewel is worn suspended from the nose. Even the working class of women have their anklets and armlets of brass and sometimes silver."

The Bengalee rises early, and usually eats three meals, at 9 or 10, at 12 or 1, and at 10 p. m. They employ their leisure in music, singing, dancing and various games of chance. The women do all the in-door work, cooking included. Major Smyth describes various games of chance, musical instruments, and indigenous modes of conveyance, and proceeds to describe the agriculture of the district.

The agriculturists number 2,90,176 to 60,290 of the consuming class. The area includes

" Cultivation,	8,78,528 acres
Village sites, rivers, jungle, roads, &c.,	3,58,400 "
Culturable and fallow,	2,00,512 "

Total, 14,37,440 = 2,246 sq. miles."

The staple product is rice of which there are three kinds—Aoosh, Amun and Borah. "The first is sown in May and June and reaped in August and September; the second is sown in June and July and reaped in November, December, and January; the third is sown in January and February and reaped in April and May." The Aoosh and Bora paddy are thus cultivated. "In the month of 'Vaisakha' (April and May), when it rains, the plough-men till a piece of high ground first, which is called 'Khill Bhanga,' and a few days after, they till it again—this is termed 'dochasee' They then sow the seed in 'Jyista' (May and June) and plough and harrow the ground a third time. When the plants grow up, they harrow the land once more and root up the weeds. Ten or twelve ploughings are generally required for cultivating one beegah of ground, and one Rupee per beegah, more or less, is expended for the purpose." "The 'Amun' paddy is cultivated by sowing and planting. In the month of 'Vaisakha' (April and May), after a fall of rain, they plough a piece of 'Shalee bhoomee' or low land, and prepare or granulate the soil after rain in 'Jyista' (May and June), and then scatter the seeds thereon. When seedlings shoot forth, it is called 'caukree tula.' In the month of 'Asarh' (June and July) or 'Sravun' (July and August), they plough and harrow the rice field and make a clayish surface; then transplant those seedlings therein in rows of about a span apart." The rice has four distinct names. While growing it is called paddy, in the husk dhan, when shelled aman, and dressed anna. The rice is cut by men sitting instead of stooping, the grain being bent down by a bamboo pushed over the field. "The cleaning or husking of the rice is thus done. As much as can be husked during a day is put into an earthen pot, to soak in water during the night; in the morning it is half-boiled, and then spread out in the sun

to dry. This is done entirely by women. The cleaning or husking is effected by means of an instrument called a 'dhenki.' This is a lever which is raised and depressed by the pressure of the foot, and having a pestle at the other end beats the husk off the rice. A maund of paddy usually yields 16 to 18 seers of clean rice. The thresher if he parboils the rice receives one-fourth for his labour; if not one-eighth. There are numerous modes of preparing rice, and the natives make out of it an intoxicating drink. There are small quantities of tobacco, gram, oats, wheat, and mustard and pan and sugar-cane are grown for the Calcutta market. Goor is manufactured and Indigo grown. The goor is the chief native product is thus prepared. "The date-tree, 'Khejur,' is reared from seed sown in the month of Asarh (June and July). It makes its appearance above ground in about five or six months. It comes to perfection in from four to six years. Much depends on the soil, saltish land being most favourable to its growth. The juice is thus extracted: Five or six of the lower branches on one side of the tree are cut down (to do this a man climbs to the top of the tree, supporting himself by a strong rope, which he passes round the tree and his own loins, tying the ends—he slides the rope up and down with his hands, planting his feet firmly against the tree, and throwing the weight of his body on the rope—in this manner, his hands are free for action—he cuts the tree with an instrument something like a bill-hook and very sharp), and a flat space about 9 inches in breadth cleared. The surface of this space is renewed twice, once in every ten days. At the end of this time, a longitudinal incision is made in the centre, and a small piece of bamboo, about 9 inches long, with a furrow cut in it, is driven into the incision. Below the end of this bamboo, an earthenware pot is hung at sunset, and the juice runs down the furrow into it. In the morning, before sun-rise, these pots are taken down and are generally full." A tree usually yields a maund a month. The goor is then prepared from the juice by boiling. "Sugar made from the 'goor' sells from 7 to 8 Rupees per maund. The 'goor' is sold to Sugar Factories, both European and Native, in the vicinity, who manufacture sugar from it and it is also exported to Calcutta. An intoxicating liquor called 'toddy' is made from the juice by fermentation. In November and December it requires from 8 to 10 seers of juice to make 1 seer of 'goor,' in January and February 6 to 8 seers, and in March and April 5 to 6 seers, and from 20 to 25 seers of sugar are manufactured from a maund of 'goor' of the average kind." The natives make sugar by expressing the treacle from the goor in bags. The

remainder is put into opened mouthed pots with a hole at the bottom. A little milk and water is sprinkled to clarify the sugar and in about twenty-five days all the moisture has run off. The remainder is sugar. Pan is usually cultivated on stiff land and the garden is covered in, watered and manured with oil-cake. Five cottahs covered with pan cost Rs. 86-4, and yield about Rs. 130, or deducting the expense of labour the work being done by the proprietor's family, the returns are about 500 per cent. on outlay. There are three crops a year. Tobacco. "The tobacco grown in the District is of two kinds, viz. Hinglee and Mandhatha, the former is the best. Light soil is usually selected, which is ploughed weekly for eight months, from February to September. The seed is sown in a nursery and transplanted about the end of September, each plant being 18 inches apart. The tops and suckers are broken off in November and December, to prevent their running to seed, and the leaves are collected in January. The produce of a beegah is from 12 to 14 maunds. The leaves are spread out for three or four days on the ground, night and day; they are then strung on a string, and hung within the house, to get the benefit of the smoke for a month, and in March are made up into bundles of $1\frac{1}{2}$ maunds each, and sold." Tobacco costs about Rs. 23 per beegah and yields about Rs. 35-2. Sugar-cane. "A rich soil is selected, and high enough to be above the usual water mark of the rainy season. The field is ploughed 10 or 12 times and manured. Cuttings of the cane are planted horizontally in the ground in March, about 18 inches apart, which sprout up in a month. In July and August ('Shrabun') the plants are about 3 feet high, when they are tied up three or four together with their own leaves, to prevent their being blown over. If there is no rain in September or October, it is necessary to water them. The canes are cut in January and February and the juice is extracted by a mill." The cost of a beegah of sugar-cane is about Rs. 18 and the produce about Rs. 30.

The plough is very light, only scratching the ground. It is drawn by cattle whose tails the ploughman takes in one hand while he guides the plough with the other. The harrow "consists of a bamboo split in two and joined across by smaller pieces of 18 inches to 2 feet long, in the form of a ladder." The rake resembles the English harrow; the reaping-hook is nearly the same as in England, but large short-handled hoes called phowrah, and khoodal, and take the place of the English hoe and spade. A complete set of farming implements is worth about Rs. 4-2-6, the plough, phowrah and khoodal being worth respectively one rupee, ten annas, and twelve annas. The most

common trees are the bamboo, mango, cocoanut, palmyra, betelnut, tamarind, date, neem, bale tree, cotton tree, gab (used as a dye) babool, bur, custard-apple, plantain, and others.

The vegetables are "ginger, turmeric, onions, begun, sweet potatoe, radishes, kumrah, meeta kumrah or pumpkin, sem, sorrel, karellah, oorcha, turbooj or water-melon, cucumber, peas, ole, garlick, carrots, french-beans, and an endless variety of mosalas, tarkari and sag, which are used in seasoning the food of the natives." The wild animals are the leopard, hog, deer, wild-cat, mungoose, jackal, and fox, but the tiger sometimes makes an incursion from the Sunderbunds, and the rhinoceros is found occasionally in Pergunnah Dholcapoor. The game consists of "the hare, jungle fowl on the borders of the Soonderbunds, wild ducks and teal of all kinds, snipe, and a few quail." The fish are numerous, including the mango, mullet, bhektee, hilsah, rooce and others. The domestic animals are all inferior, but include cows, sheep, goats, bullocks and buffalos. Ducks, fowls and pigeons are reared by Mussalmans. The district contains no minerals of any kind.

The commerce of the district comprises rice, goor, pan, tobacco, indigo, cloths, silk, mats, curds, vegetables, fish, and pottery. Almost all the traffic is carried by water.

Accounts are kept as in other parts of India, but the cowrie currency is thus calculated :—

4 Cowries,	=	1 Gundah.
20 Gundahs,	=	1 Pun.
4 Puns,	=	1 Anna.

The standard of weight is the tola of 180 grains. The standard seer is 80 tolas, and the standard maund lbs. 100 troy. The maund for weighing salt is $2\frac{1}{2}$ per cent. heavier than the bazar maund. In parts of the district other weights are used. Liquids are sold everywhere by weight in seers.

The linear measure originated thus :—

5 Fingers' breadths,	=	1 Palm.
6 Palms,	=	1 Hath.

Which in square measure becomes

20 Gundahs,	=	1 Chittack.
16 Chittacks,	=	1 Cottah.
20 Cottahs,	=	1 Beegah.

The standard beegah of the district used for the survey is 1600 square yards.

The native usually tells time by the length of his shadow but he divides the day thus :—

15 Namesh,	=	1	Kastah.
15 Kastah,	=	1	Pol.
60 Pols,	=	1	Dundo.
2 Dundo,	=	1	Mohoteek.
15 Mohoteek,	=	1	Day of 12 hours.

The seasons are six—Greeshoo, Bursha, Shurut, Heymont, Seesheer and Busunto.

“The District comprizes two grand Divisions, *viz.* Allipoor and Baraset, and contains 48 Pergunnahs. Of these 37 are *bona-fide* Pergunnahs, the remaining 11 consist of villages scattered over these 37, which, when collected together, obtain a Pergunnah name. In addition to the above, there is the City of Calcutta and the adjoining Government Estate of Panchanungram, neither of which come under this denomination.” The Alipore Division contains 1,036 square miles. The Baraset Division contains 1,241 square miles or altogether 2,277 square miles containing 4,450 village Circuits. Major Smyth describes the tenure, and observes that the Zemindar usually lets land at from 12 As. to 1 Re. 4 As. per beegah, but the ryot pays from one rupee to five. His house at starting costs him Rs. 15, and his agricultural implements, bullocks and furniture 17-2. The cost of working his nine beegahs is Rs. 41 a year, and the profits about Rs. 26-2. The return is large as a percentage, but he pays $37\frac{1}{2}$ per cent. on the capital absorbed in setting himself up. A yeoman however with a small capital renting 30 beegahs makes 125 rupees a year. “This farmer, notwithstanding the rent he has to pay to the Zemindar, which is nearly half of his expenditure, and having no interest to pay, clears 57 per cent. on his expenditure. The interest would have been 83 Rupees. Out of his proceeds, he has to pay his religious fees, which cannot be estimated, and his barber. Farms vary from 8 or 9 beegahs up to 150 beegahs: there may be a few above this area.”

Major Smyth proceeds to describe Calcutta. It comprises an area of 7-80 square miles, and the population according to Mr. Simm's estimate is 3,61,369. There are 13,120 pukka houses, and 49,445 kutchah. There are 265 places of worship, 167 of which are Hindoo, 74 Mussalman, 1 Jewish, 1 Armenian, 1 Greek, 1 Chinese, and the remainder different denominations of Christians. “There are 1,043 tanks, 29 public buildings and offices, 9 buildings belonging to charitable institutions, 5 burial grounds, and 20 bazars or markets. The total length of the public roads is 125 miles. The highest part of the town in Clive Street, opposite Cotton Street, is 30-63 feet above the zero of the Tide Gauge at Kyd's Dock-yard at Kidderpoor, and the lowest part in Muchooa Bazar Street is 18-01 feet above the same datum.

Calcutta has extensive, irregular, and thickly-peopled suburbs. In 1717 the Company purchased 38 villages about Calcutta, which now form these suburbs. Panchanungram, which name would lead to the supposition that 50 had been purchased, is situated North, East and South of Calcutta, and comprises an area of 23·17 square miles. They extend $2\frac{1}{4}$ miles North, $2\frac{3}{4}$ miles East, and $2\frac{3}{4}$ miles South of the boundary of the town itself, and are out of the jurisdiction of the Supreme Court." Major Smyth adds facts of all kinds about each Pergunnah, and supplies the following statistics of the Survey :—

STATEMENT shewing the date of commencement and final completion of the Survey of 24 Pergunnahs District, Area, Cost, and Average Rate per Square Mile.

District.	Name of Surveyor.	Date of commencement of Survey.	Date of final completion of Survey.	Area in square miles.	Cost.	Average rate per sq. mile.	Remarks.
24 Pergunnahs,	Major R. Smyth, ...	22nd December, 1846, ...	30th September, 1852, ...	22.77	Rs. As. P. 1,12,625 3 4	Rs. As. P. 49 7 4	The first season's work of this District, executed by Mr. Wilson, comes to about 150 Rs. per square mile. This was rejected, and consequently affected the general average. Excluding Mr. Wilson's work the cost of the 24 Pergunnah Survey, under Major Smyth's superintendence comes to Rupees 38-6-10 per square mile.
Punchanungram,	Ditto, ...	1st November, 1848,	30th November, 1852,	10.75	9,952 8 10		This being a minute survey of Holdings, the rate per mile is not applicable.
Soonderbund Boundary,	Ditto, ...	15th January, 1850,	30th September, 1851, ...	250.00	16,720 9 5		This being a Topographical Survey of the line of boundary, with a certain portion of the Grants in the Soonderbunds, the rate per square mile is not applicable.

REVENUE SURVEYOR GENERAL'S OFFICE;
Calcutta,
The 21st April, 1857.

H. L. THUILLIER,
Deputy Surveyor General.

THE MUTINIES.

Parliamentary Blue Books.

THE Governor General in Council on the 7th February, 1857 forwards to the Court of Directors a correspondence relative to a feeling of uneasiness created amongst the men attached to the depot of musketry at Dum-Dum consequent on a report having reached them that the grease used in the arsenal for preparing the cartridges for the Enfield Rifles was composed of the fat of "pigs" and of "cows." The men were appeased by an order permitting them to receive the cartridges without grease, and to apply with their own hands whatever mixture they might prefer. As service ammunition required to be greased with some substance that would be durable, experiments were ordered to be made at Meerut, where H. M.'s 60th Rifles were stationed, to ascertain the best ingredients for greasing the cartridges, with reference both to the feelings of the native soldiery and to the requirements of the service. The matter was fully explained to the men both at Barrackpore and at Dum-Dum, and they appeared perfectly satisfied; but the Governor General recommended to the Home Authorities not to send ready-made ammunition from England. The Court of Directors on the 8th April approve the proceedings, and assent to the recommendation. They send a Memorandum by the Inspector General of Stores, stating that the grease used in making up cartridges forwarded to India is composed of five parts tallow; five parts stearine; and one part wax. The composition of the tallow itself, he cannot explain, but there is no hog's lard in it.

On the 8th April, the Governor General reports that the Sepoys at Barrackpore have objected to the paper of the rifle cartridges, and that a special Court of Enquiry was held at that station to ascertain the cause of the objections. The proceedings recorded show that the unfounded suspicion of the sepoy that the cartridges were greased with the fat of pigs and cows could not be removed; and as no composition free from grease appeared to answer the required purpose, the sepoy was allowed to tear off the end of the cartridge with their left hand, instead of biting it off. This altered mode of loading was also made applicable to the ordinary percussion musket on the recommendation of the Commander-in-Chief; and the Governor General in Council recommends that if the new plan is found to be as effective as the old practice of biting the end off, the change may be introduced in Her Majesty's Regiments in India. On the same date the Governor General in Council reports to the Court of Directors the circumstances which had led to the

dismissal of the whole of the native officers, non-commissioned officers, and sepoy of the 19th Regiment of Native Infantry who were present with the Regiment at Berhampore on the 26th of February last, when that Regiment committed an act of mutiny in refusing to obey their officers, and in forcibly possessing themselves of their arms. The ill feeling showed itself at Berhampore towards the end of February. The men refused to receive the new cartridges, alleging that the paper of which they were made was of two sorts, and was said to be greased with cow's and pig's fat. The Governor General on the 27th March recorded a Minute, concurred in by the Members of Council, stating the grounds for disbanding the 19th Regiment. After narrating the principal facts connected with the conduct of the men of that Regiment when it mutinied, the Governor General says that "from the moment when the main facts of the outbreak were established, it was clear that no penalty short of disbandment would meet the case. Additional guilt might possibly, by closer enquiry, be fixed upon individuals as instigators or ring-leaders, and to these additional punishment might be found to be due; but the open refusal of the whole Regiment to obey orders, the seizure of arms with violence, and a tumultuous but combined resistance of the authority of its officers with arms loaded, is an offence for which any punishment less than dismissal from the service of the State would be inadequate: mutiny so open and defiant cannot be excused by any sensitiveness of religion or caste, by fear of coercion, or by the seductions and deceptions of others. It must be met promptly and unhesitatingly, and without the delay of a day more than may be necessary. Accordingly, it has been resolved by the Governor General in Council, that the 19th Regiment shall be disbanded immediately, and that the disbandment shall take place at Barrackpore. In accordance with this resolution, the Regiment was ordered down to Barrackpore, where, on the 31st ultimo it was disbanded. The men were disarmed, paid up and marched to Pulta Ghaut. Major General Hearsey carried into effect this resolution of the Government, and is praised for the admirable manner in which he performed this most difficult and trying task entrusted to him." And the Governor General hopes, that the "severe measures, which he has been compelled to adopt will have the effect of convincing the Native Troops, that they will only bring ruin on themselves by failing in their duty to the State and in obedience to their officers." A General Order containing the decision of the Governor General upon the offence which the 19th Regiment had committed, and its disbandment in consequence, was read and read to that corps and the other troops on parade on the occasion.

On the same day, the 8th April, the Governor General in Council further reports that on the 29th March, Mungul Pandey, a sepoy of the 34th Regiment N. I. at Barrackpore having armed himself with a sword, and loaded musket, fired at Lieutenant Baugh, the Adjutant of the corps, and shot his horse. Lieutenant Baugh fired his pistol and missed the man, who then attacked the officer with his sword, and wounded him in the hand. The Sergeant Major of the corps who went to Lieutenant Baugh's assistance, was also wounded by the sepoy. Major General Hearsey arrested the man himself; and in submitting the proceedings of a Court of Enquiry reported his own part in the transaction. He was warned on the afternoon of the 29th March, by one of his Orderlies that the sepoys were turning out on their parade. He immediately rode with his two sons to the parade, and found the mutineer walking up and down. He ordered the Guard to arrest him, which they delayed doing. He then rode towards the mutineer followed by the Guard. Mungul Pandey fired, and the Guard hearing the whistle of the bullet bent to avoid it. The mutineer then fired at himself, and fell with a superficial wound and his clothes on fire. He was secured and sent to Hospital. On the 9th April evidence was taken as to the conduct of Shaik Pultoo, a sepoy of the 34th N. I. who assisted in saving Lieutenant Baugh's life, was made a Havildar on the spot, and recommended for the order of merit. His statement contains the facts. "The sepoy Mungul Pandey, about 4 o'clock p. m. in the afternoon of the 29th March, was straggling backwards and forwards in front of the quarter guard armed with a musket and sword, he had on his red jacket and regimental cap, endeavouring to excite the men of the Regiment to mutiny; some one told the Sergeant Major of this, and he came towards the quarter guard, asking the Jemadar of that guard where Mungul Pandey was, and why he did not confine him. Mungul Pandey then fired at the Sergeant Major, but missed him; he reloaded; the Sergeant Major, being alarmed, ran into the quarter guard, and asked the Jemadar why he did not arrest Mungul Pandey who had reloaded his musket, and told him to send and let the Adjutant know what had occurred on the parade ground. Shortly after this the Adjutant, on horse back, arrived, and asked the Jemadar where the sepoy with the arms was, and why he had not secured him; the Jemadar gave no reply, but I pointed him out. Mungul Pandey was then standing in front of the quarter guard. Just as I spoke he fired at the Adjutant, and wounded his horse. The Adjutant then pulled out a pistol and said, "that man will kill me, he is loading again." I said, "you will not be allowed to be killed, for I am with you." The Adjutant then, with pistol in

his hand rushed towards Mungul Pandy, who, on seeing this did not finish loading his musket, and commenced retreating. The Sergeant Major and I followed the Adjutant as quick as we could. The Adjutant, when within twenty paces, fired at Mungul Pandy, but missed him; when the Adjutant reached him, Mungul Pandy drew his sword and wounded him severely. By this time the Sergeant Major came up, he also was wounded severely. I then came up, and stretched out my hand to stop Mungul Pandy, who was following the Adjutant, and said to him, "Take care, do not strike the Adjutant." He aimed a blow at the Adjutant's neck, which I received on my right hand; I then seized him round with my left arm; the Adjutant and Sergeant Major then got away. I then called out to the Quarter Guard to come and make Mungul Pandy a prisoner, and told the Jemadar Issurie Pandy, who commanded the Guard to send four men, and take him; that I had hold of him and would not allow him to hurt any one; they did not come, but abused me as also did the Jemadar, and said that if I did not let Mungul Pandy go they would shoot me. Being wounded, I was obliged to let him go. While I was holding Mungul Pandy, several men of the Quarter Guard followed the Adjutant and Sergeant Major, beating them with the butt-ends of their muskets."

On the 6th April the Native General Court Martial assembled for the trial of Mungul Pandy. Fourteen native officers besides the President was present. The evidence given at the trial confirmed Shaik Pultoo's story, with the addition that the accused was a man of good character. Fourteen officers found him guilty and eleven voted death. He was executed on the 8th April.

Major General Hearsey on the 6th April, in forwarding a Divisional Order issued by him, notifying the promotion of Shaik Pultoo to be Havildar, recommended that the order of merit be bestowed on him, and that the energetic and gallant conduct of Lieutenant Baugh and Sergeant Hewson be noticed in General Orders. The Governor General, on the 10th April, remarks that it is not in the power of the Major General commanding the Division to make the promotion, which can proceed only from the Government of India, and therefore should not have appeared in a Divisional Order without the sanction of Government. But as the promotion has been announced and the distinction is richly deserved by Shaik Pultoo it is confirmed. The recommendation of Shaik Pultoo for the order of merit will come before the Government in the ordinary way through the Commander-in-Chief. The proposal to publish a General Order on Lieutenant Baugh and Sergeant Major

Hewson is rejected. The Governor General in Council greatly admires the determination and courage shown by those officers, but thinks it undesirable that the sepoys should be led to think the achievement extraordinary, or that the affair should be paraded at all.

On the 14th April Government with reference to trials then going on at Barrackpore, requested the Commander-in-Chief to empower General Hearsey to confirm all sentences on native commissioned officers. On the 16th April, the Commander-in-Chief replies that he has not the power (vide Act 7th, Vic. Chap. 18.) On the 18th April Government reply the Commander-in-Chief has power under 73rd Article of War; and on the 20th April, the Commander-in-Chief confirmed the sentence passed on Issuree Pandey, Jemadar, 34th Regiment, and a warrant was despatched authorizing the General to confirm such sentences. This man was tried on the 10th April for having, at Barrackpore on the 29th March, 1857, "he being then in command of the quarter-guard of his Regiment, not used his utmost or any endeavours to suppress a mutiny begun by Mungul Pandey, sepoy of the Regiment, the said sepoy having on the afternoon of that day, gone out into the parade ground in front of and near to the quarter-guard of the Regiment armed with a sword and musket, and then and there used words to excite the men of the Regiment to come forth and join him in resistance to lawful authority; and having then and there on the parade-ground and near to the quarter-guard of the Regiment, discharged his loaded musket at Sergeant Major James Thornton Hewson and Lieutenant Bempde Henry Baugh of the 34th Regt. N. I., and then and there, with a sword, struck and severely wounded them, and to the said Jemadar not having taken any measure to arrest and confine the said sepoy throughout the aforesaid occurrences, nor to assist the said Lieutenant Baugh and Sergeant Major Hewson, and he the said Jemadar, having moreover, then and there, discouraged and interfered to prevent any sepoys of his guard from going to their assistance, and for disobedience of the lawful command of his superior officers, in not having advanced with his guard to rescue the Sergeant and capture the aforesaid sepoy, Mungul Pandey, when, shortly after the occurrences set forth in the first charge, he was ordered to do so by Brevet Colonel S. G. Wheler, Commanding the 34th Regt. N. I." It was proved in evidence reported at length that the Jemadar though commanded to assist in arresting Mungul Pandey did not, and refused to allow three sepoys who wished to go to move. He was found guilty, twelve officers out of fourteen voting for death. He was executed on the 21st April.

In a subsequent Court of Enquiry held on the 17th April with closed doors it was stated by Durriou Singh, Jemadar, 34th N. I. that on the 26th of January, there was a halt of the three Companies which went to Chittagong at Calcutta near the fort. Subadar Major Ramlall of his Regiment was on guard at the Lieutenant Governor's at Allipore. On that day the Guard was renewed and returned to Barrackpore. The Subadar Major Ramlall, and Subadar Muddeli Khan and Subadar Lalla Gopal and Jamadar Lalla Gunness, sent for the Moonshee of the Regiment, and had a letter written and sent off to Rajah Maun Sing. Ramlall Subadar Major, came to Durriou Singh's guard, which was at the Treasury, on the day that the guards were relieved. He arrived about 10 o'clock, and remained till 12, talking in a treasonable manner, loud enough for all the men to hear, telling them what they were to do, and that he was going off to Barrackpore and could not remain there to conduct matters. The treasonable matters talked about were the cartridges and a refusal to serve any longer. The plan was with the four Regiments and three Companies going to Chittagong, to seize the fort. The King of Oude was to assist, as also the Calcutta Militia, and the sepoy's pay was to be raised to 10 Rupees a month. On the 15th April, a special Court of Enquiry was assembled at Barrackpore to receive the evidence of the European officers as to the state of feeling in the 34th N. I.

Brevet Colonel S. G. Wheeler deposed—Regarding the seven Companies at Regimental Head Quarters, he was of opinion that since the latter end of January last, the men have been more or less in an excited state on account of the new rifle cartridges, and they have shown this feeling both secretly and openly on some occasions. In the latter end of January several Bungalows were burnt down, amongst others the Electric Telegraph Bungalow. A general parade took place on the 9th February, when the subject of the cartridge paper was explained to the men by the General. That explanation seemed to quiet the men a good deal for the time. From all that has occurred, he was of opinion that it was the intention of the Regiment to coerce and resist the Government, and that the feeling in the Regiment was decidedly bad; but that now the men appeared to be very much frightened. His distrust extended only to Hindoos.

Captain W. W. Aubert, 34th N. I., deposed that between May last year, (when he returned from Furlough,) and the date of his entering upon his appointment at Barrackpore, he observed a great want of respect on the part of the men towards their European officers. For instance, he frequently noticed, when he went to the lines on duty and in uniform, that the

men did not stand up and salute him ; a mark of disrespect for which he punished the men of his own Company, and reported those of other Companies. Again when the Regiment was coming down by water in October and November last year, it encountered a severe gale in which three boats were wrecked, but not a single sepoy came forward voluntarily to assist the European officers in getting their boats out of danger. His distrust extended only to Brahmins.

Ensign F. E. A. Chamier, Interpreter and Quarter Master, deposed that the native officers and men were generally disrespectful towards their European officers. He would not trust the Hindoos.

Captain C. C. Drury deposed that with the exception of a few men, the general feeling of the Regiment was very good indeed. Had found sepoys less respectful, but believed it arose from the lax state of discipline.

Lieut. A. C. Bumbury thought the feeling of the Regiment good. The Court were of opinion that the Sikhs and Mussulmans were trustworthy, but not the Hindoos. On 17th April the Court re-assembled, and Lieut. and Adjutant B. H. Baugh deposed that he did not exactly know what might be the present feeling of the native officers and men of the Regiment, but their conduct hitherto had caused him to distrust them. About two months ago, the men were ordered to be paraded in their Hindoostanee clothes, in order that the new cartridges might be shown to them ; their conduct on that occasion was most unruly and insubordinate. Moreover their conduct at the time of the attack on him was such that he had no hesitation in stating his conviction that all of them were cognizant of what was going to take place, fully prepared for what did take place, and all more or less implicated. On questioning some of the men a day or two afterwards as to where they were on the occasion referred to futile and confused answers were returned. He would rely on the Mussulmans and Sikhs. Noticed a change in the regiment from the time of the formation of Rifle Depots.

Lieut. and Brevet Capt. A. S. Allen believed that the Regiment had shewn no symptoms of disloyalty as sepoys, had tried to save him on the 29th March, and one man revealed a combination of all the Regiments at Barrackpore. Would have as much confidence in the 34th Native Infantry as in any native Regiment.

Lieut. J. T. Liscombe deposed that he considered the Regiment to be in a disaffected state as on going down to the lines on the evening of the 29th March he saw the whole of the men there looking on at the armed mutineer, and not attempting to seize him.

The Court upon the additional evidence before them, adhere to their former opinion.

On the 29th April Major General Hearsey presented to Government a Petition from the three Companies of the 34th Regiment N. I. stationed at Chittagong, expressive of the exceeding abhorrence with which they have viewed the recent disgraceful conduct of some of their comrades at Regimental Head Quarters at Barrackpore, and at the same time begging to assure the Government of their own faithful and loyal feelings towards the State. On the 29th March there were in the 34th Regiment 335 Brahmins, 237 Chuttees, 231 Hindoos of lower caste, 12 Christians (two of them sepoys) 200 Mussulmans and 74 Seikhs.

On the 30th April the Governor General records his opinion that the Regiment must be disbanded. The disbandment to be so far tempered as that those of all ranks who were manifestly absent from the lines on the 29th of March, shall be exempted from it, as also those who upon that or any other recent occasion have shown attachment, and fidelity to their officers and to the State. But the Governor General sees no possibility of drawing a line of separation between creeds, in the spirit of the decision given by the special Court of Enquiry, and which should have the effect of relieving the Sikhs and Mussulmans who were present, from the punishment to be inflicted upon the Hindoos. It would be impolitic and dangerous to attempt it. Mr. Dorin concurs. General J. Low concurs, and while fearing some good men may be involved in the order, thinks it is in the highest degree important to avoid any act which could be supposed by the Indian community to indicate that Government is more indulgent towards certain classes of men among its native soldiers than it is to any other class on the score of their religion. Mr. Grant concurs deeming the punishment even lenient. Mr. B. Peacock concurs, but would extend the penalty to certain individuals exempted by the Governor General. In subsequent correspondence the exemptions are upheld. On the 4th May, 1857, the Governor General in Council in a General Order recapitulates the facts, and sentences the Regiment with exceptions to disbanding. The sentence was carried out on the 6th May.

On the 3d April the Military Secretary informed Major General Hearsey that Colonel S. G. Wheeler, Commanding 34th N. I. had of late held language to the men of his Regiment, indicating that it was his expectation that they would, sooner or later, be converted to Christianity, and that he has lately addressed them on religious subjects, and requested information. In reply Brigadier C. Grant stated that he knew only one occasion on which Col. Wheeler had addressed the men, and on that one he said the British Government never interfered with

the religion of its subjects. Lieut. Col. Wheler himself replied that he had not expressed any belief that the sepoys would become Christians, though he much wished it, but with regard to his having addressed the sepoys on religious subjects, he said that during the last twenty years and upwards he had been in the habit of speaking to natives of all classes, sepoys and others, making no distinction, since there is no respect of persons with God, on the subject of our religion, in the highways, cities, bazars, and villages (not in the lines and regimental bazars). He has done this from a conviction that every converted Christian is expected or rather commanded by the Scriptures to make known the glad tidings of salvation to his lost fellow creatures, our Saviour having offered himself up as a sacrifice for the sins of the whole world, by which alone salvation can be secured. He has directed that this salvation should be freely offered to all, without exception.

On the 13th April, Government request further information, particularly as to the point whether Colonel Wheler had spoken of religion to the men of his own Regiment. In reply Colonel Wheler observes that it has been his invariable plan to act on the broad line which Scripture enforces, that is, to speak without reserve to every person; and therefore whenever he addresses natives on this subject, whether individually or collectively, it had been no question with him as to whether the person or persons he addressed belong to this or that Regiment, or whether he is a shopkeeper, merchant, or otherwise, but speak to all alike, as sinners in the sight of God; and he has no doubt that he has often, in this way (indeed, is quite certain) addressed sepoys of his own Regiment, as also of other Regiments at this and other stations where he has been quartered.

On the 9th April, the Governor General records his opinion that Colonel Wheler's conduct on the 29th March, demands investigation. His Lordship adds that Colonel Wheler's answers to enquiries directed to him about his religious teaching are not satisfactory, but he does not propose to submit this part of his conduct to Military investigation. The Members of Council agree with His Lordship.

On the 29th March, Colonel Burney reports that the men of the 63rd N. I. stationed at Soorie object to receive their furlough, alleging that the men of the Barrackpore regiments do not intend to take theirs. Two men from Barrackpore had come up by train via Raneegunge to Soorie with a written communication. Previous to this the men agreed to take furlough. The men immediately after returned to a sense of their duty. Major General Hearsey recommends that the fourteen men conspicuous for this refusal should be dismissed the service. On

the 6th April the Governor General observes that he cannot concur in the recommendation of Major General Hearsey, as the offence was accompanied by exterminating circumstances and followed by their return to duty. The men belonged to a Regiment which had resisted all overtures to shake their fidelity, and it was therefore sound policy to pass over the offence with a warning. The Members of Council concurred, Major General Low remarking that on any future occasion any sepoy who took a prominent part in such a proceeding should be summarily dismissed.

On the 2nd April Colonel Keith Young forwards to the Government of India proceedings at a Native General Court Martial held at Fort William on Boodheelall Tewarry and Bahadoor Singh, sepoys of the 2d N. I. Grenadiers for having when on duty on the Town Major's Guard at Fort William, at or about 10 o'clock on the night of the 10th of March, 1857, quitted their guard without being regularly relieved and without leave, and not returned until brought back as prisoners on the following morning. "2nd. For mutiny in having during the absence from the guard, as set forth in the first charge, at about half past 10 o'clock at night, together gone to the Mint Guard in Calcutta, and then and there endeavoured to induce Soobadar Muddeh Khan, then Commanding the Mint Guard, to quit his post, and march on that night with his guard into Fort William, for the purpose of joining in an intended mutiny or concealed combination against the State." Subadar Muddeh Khan, Mussalman, affirmed that on the 10th March while in command of the Mint Guard at about the time of half past 10 o'clock at night, he was sitting on my charpoy, reading. "These two sepoys who are now prisoners before this Court (witness pointing to them both) came up to me. I said to them, where do you come from and who are you? The sepoy who is on the left (pointing to the prisoner Boodheelall Tewarry) said, I have come from the Fort and from the men off duty on the Reserve Guard. I said, well. The sepoy, the one who was speaking, said, At 12 o'clock the Calcutta Militia is coming into the fort, and do you also bring the Mint Guard at that time into the fort, the Governor General is going up to Barrackpore at 10 o'clock, and after taking possession of the magazine there will be some fighting. I was angry and told him to be silent, saying, Hold your tongue, you rascal! how can you say such improper things? I said, get out of this. They went to the door of the guard room and again stopped. I called out for the Naick of the guard, Allahooden, and told him to place them in confinement and place an extra sentry over them. I gave orders that no one should be allowed to come near to them, or speak to them.

They remained all night in confinement, and next morning I sent them off with a Naick and four, with the Havildar, who goes to make the daily report to the Town Major. This is what happened. When they were being taken off the guard they both joined their hands and begged to be pardoned. I said, I have no power. I cannot pardon such an act."

The evidence supported this statement, and the Court sentenced the prisoners to fourteen years' imprisonment with hard labour. The sentence was approved and confirmed by the Commander-in-Chief. General Anson however records on 1st April an opinion that death is the appropriate punishment for such an offence, but that to some even fourteen years of disgraceful labour may be worse than death. He also promises to reward the Subadar who arrested the men.

On the 19th May the Governor General in Council reports to the Court of Directors the alarming events at Meerut and Delhi, and recommends that the six revolted Regiments be replaced by three Regiments of Europeans. Those events and the recent disclosures of bad feeling in the native army shew that the proportion of Europeans has been reduced too low. It is at present in the Bengal army as 1 to 24½, while in the Bombay army it is as 1 to 9½ and in the Madras army as 1 to 16½. If the proposed measure is adopted, the proportion in the Bengal army will be between those in the Bombay and Madras armies, viz., 1 to 11½. The financial result of the change would be :—

Cost of two Native Infantry Regiments, each of 1,160 native officers and men and two Colo- nels,	Rs. 5,44,336	8
Cost of an European Regiment of 927 rank and file, one Colonel,	5,30,985	6

Cost of European, less by the above, supposing
every officer and man to be with his Regiment, 13,351 2

Further reductions might be made by allowing only one Colonel, one Lieutenant Colonel, one Surgeon, one Adjutant and one Quarter Master. On the same day a narrative was enclosed stating that some eighty-five men of the 3d Light Cavalry who had been tried by a Court Martial, for refusing to use their cartridges, the old sort, as none of the new kind had been issued, were sentenced to imprisonment, and sent to Jail on the 9th May. On the 10th, the troopers of the Regiment broke into the Jail, and released these men. Nothing is known of the further proceedings at Meerut, but that some 100 men of the 3d Cavalry left the station, and took possession of the Hindun Bridge; telegraphic communication between Delhi

and Agra, and between Meerut and Allyghur, was interrupted; a sepoy arrived, and a Cavalry trooper was apprehended at Bolundshuhur on the 11th. At Allyghur all appeared quiet; strong bodies of police were placed on the road to Meerut, to intercept all straggling sepoys and sowars. The mutineers from Meerut appear to have proceeded to Delhi, and on being joined by the native troops at that place headed by the 38th Regt. N. I., took possession of the palace, fort and town. On the 13th, five sepoys of the 11th and 20th Native Infantry were apprehended at Allyghur. These men had left Meerut and were sent to Jail. Mr. Carter, a Railway Engineer reached Allyghur, having fled from Puloa (probably Purlwal), twenty-seven miles from Delhi, on the road to Muttra. He reported that a large body of insurgents had marched from Delhi towards Agra via Ballaghur (probably Bullumghur, near Pulwal), where Mr. Roods, the Portrait Painter is said to have been killed.

In a message dated the 14th, the Lieut. Governor said that he had received authentic intelligence from the King of Delhi that the town and fort, and his own person, were in the hands of the insurgent regiments, which joined about 100 of the Meerut troops, and opened the gates. The treasury and fort at Meerut were safe on the 12th, and the troops ready to move. Mr. Colvin states that he had addressed the native troops at Agra. A deep and genuine conviction has seized the minds of the sepoys of the army generally, that the Government is steadily bent upon making them lose caste by handling impure things. Mr. Colvin urges the desirableness of issuing a proclamation to the army, pointing out that Government would in every way respect and protect their religious feelings and usages of religion and caste. On the 15th Mr. Colvin recommends that Martial Law should be proclaimed in the Meerut district, the force there being strong and fully prepared to carry out the measure; this was authorized at once. The Maharajah Scindiah had offered his own body guard and a battery of artillery. In addition, a regiment of Cavalry, and a battery of the Contingent, were to go to Agra, and two regiments of Infantry to occupy the road between Delhi and Agra. The mutineers from Meerut appear to have reached Delhi on Monday night, the 11th or Tuesday, the 12th; the Delhi troops, headed by the 3rd Light Infantry, fraternized with them, shot their officers, and put to death all the Europeans, with the exception of a few who escaped across the Jumna. Lieutenant Willoughby, the Commissary of Ordnance, blew up the magazine; the powder magazine, which is near the native lines, alone fell into the hands of the insurgents. Thirty Europeans are said to have been massacred in the city and civil lines. The rebels declared the heir apparent

King ; they are apparently organizing a plan of regular Government ; they remain in the place ; their policy is supposed to be to annex the adjoining districts to their newly founded kingdom ; they may have received fifty lakhs of Rupees. The Regiments that have joined are the 11th, 20th (Meerut Regiments) 38th, 54th and 74th (the Delhi Garrison.) The Lieutenant Governor has received aid from Gwalior and Bhurtpore. The Bhurtpore troops and Gwalior Contingent are to arrive at Muttra in a day or two to keep open the road. A message from Meerut reports the arrival of the Sappers and Miners from Roorkee. The Sirmoor Battalion (Goorkhas) has marched from Deyrah, and the 75th Foot and 1st European Regiments from the Hills. The European Infantry and Artillery Barracks form a place of safety for women and stores, guarded by European troops. The Sirmoor Battalion reached Meerut on the evening of the 16th. There is excitement at Cawnpore, Allahabad and Benares. Full power is given to Sir Henry Lawrence to raise Irregulars. Intelligence received of the Sappers at Meerut having mutinied on the 16th, shot their officers and proceeded to Delhi. They were followed, and about fifty were cut up, the men dispersing. At Lucknow all was prepared on the 17th, the troops having concentrated so as to protect the treasury and magazine. The Lieutenant Governor and Commander-in-Chief have been warned of the importance of attacking Delhi at once. All is quiet at Agra. The Syuds and Jats are entering the field on our side. A wing of the Bengal Seikh Police Battalion has been ordered to Dinapore. The powers of officers commanding troops to assemble General Courts Martial have been extended. Sir Henry Lawrence has been created Brigadier General with full military power in Oude.

A proclamation has been issued assuring the native troops and the people that Government never have and never will interfere with their religious observances or creed. A General Order has also been issued, authorizing the Commander-in-Chief, the Lieutenant Governors, Chief Commissioners, Major Generals, Brigadiers and Officers Commanding Stations at which there may be two or more corps, to promote any non-commissioned officer to a commission, and sepoy to non-commissioned officers for any conspicuous acts of loyalty and gallantry, and the Commander-in-Chief and Lieutenant Governor and Chief Commissioner are authorized to admit native officers and soldiers to the order of merit. Enclosed are telegraphic messages on which the narrative is founded, and the Act VIII. of 1857 for increasing the powers of officers Commanding Divisions and Stations for the trial and punishment of officers against the Articles of War for the native army. The most remarkable message is the follow-

ing which contains most of the facts relating to the demand for reinforcements in a few words.

The Governor General to the Lieutenant Governor, Agra, "send word as quickly as possible to Sir John Lawrence, that he is to send down such of the Punjab Regiments and European Regiments as he can safely spare.

Every exertion must be made to regain Delhi, every hour is of importance. If you find it necessary you may apply to the Rajah of Puttialla, or to the Rajah of Jheend, for troops. I am glad you accepted Scindia's. I have sent for an European Regiment from Madras and from Pegu, but they cannot be here for a fortnight, and until then I cannot spare a single European from here. Peace is ratified, but the troops from Persia cannot be here for many weeks, send on the following message to the Commander-in-Chief.

The Madras Fusiliers left Madras for Calcutta on Sunday. The *Oriental* has been despatched to bring up the 35th from Moulmein. An officer goes to Ceylon by to-morrow's mail, to bring European troops from there. A European Regiment has been ordered from Kurrachec by steam to Mooltan, and will be brought up from there in boats. Two European Regiments and some Artillery will come round to Calcutta from Bombay, where they are expected immediately from Persia. I hope to catch the Regiments which are on their way to China. But time is every thing, and I beg you to make short work of Delhi."

On the 4th May Sir Henry Lawrence, Chief Commissioner of Oude reports that on the 2nd May the 7th Oude Regiment refused to bite the cartridges when ordered by its own officers, and again by the Brigadier. It was ordered to parade on the 4th. On the 3rd symptoms of disaffection appeared and in the afternoon it was in a very mutinous state. A force consisting of a field battery, a wing of H. M.'s 32d, one of the 48th and 71st N. I. and of 7th Cavalry, the 2nd Oude Cavalry and 4th Oude Infantry marched against it. The Regiment was found perfectly quiet and expressed contrition; but on seeing the guns drawn up half their body fled throwing down their arms. The Cavalry pursued and brought up some of them. The Regiment was then disarmed, and was told that Government would be asked to disband the corps; but that those found guiltless might be re-enlisted. On the 10th May the Governor General records his opinion that Sir Henry Lawrence should be supported, but that the Regiment should be finally disbanded. Mr. Dorin is of opinion that a severe punishment is necessary to check the epidemic of mutiny. Mr. Grant believes it expedient to wait for further information. General Low would select a few of the most guilty for trial, as would Mr. Peacock.

The following order was dispatched on the 13th May to Lucknow: Sir Henry Lawrence is informed that the Governor General in Council approves of the prompt measures adopted by him in regard to the 7th Oude Regiment: but His Lordship is of opinion, that the dishandment to whatever length it may be carried should be real, and that the men whose innocence can be shown, and whose general character is irreproachable, or those by whom offenders have been denounced, and mutinous designs disclosed, should be retained in the ranks, the others being dismissed absolutely and finally, as there is a fiction in discharging soldiers one day to take them back the next, whatever may be their claims to mercy, which would greatly weaken the general effect of the measure of disbandment as an example. The extent to which such a measure should be carried, and the nature of further punishment in individual cases, will be considered when Government is informed of all the circumstances attendant upon the occurrences of the 4th May; and the Governor General in Council feels it necessary that he should fully understand how the refusal on the 2nd May to bite the cartridges was manifested; what passed previously on the subject, and what were the circumstances which led to the refusal; how the symptoms of disaffection, shown on the 3rd May appeared; whether in such a manner as to implicate the whole Regiment or a portion only; and if the latter how many individuals. Explanation was also necessary as to the Regiment being reported to be in a state of mutiny on the 4th, for on the same evening it was found perfectly quiet and expressed contrition. Sir Henry Lawrence was also desired to state whether subsequently the circumstance of the Regiment breaking and throwing down its arms formed a part of his grounds for disarming it, and whether the panic was attributable to any movements accidental or otherwise, threatening or seeming to threaten, the opening of fire. If these points are not embraced in the enquiry stated in Sir Henry's Telegram of the 12th to have been already made, he is requested to make a further investigation into the subject, including the conduct of the European officers of the Regiment prior to and during the occurrences in question. A book recently published by order of Government on the practice with Rifles, in which it is directed that the cartridges should be torn open, and no allusion is made to the old practice of biting it, was despatched to the Regiments of Oude Local Infantry on the 4th April; Sir Henry was directed to state when that work was received by the corps at Lucknow.

On the 17th May in a Telegram Sir Henry states that the case being emergent he has disposed of the 7th Regiment of

Oude, by dismissing 15 sepoys, and with one or two exceptions, the native officers, the rest forgiven. Their Commanding Officer has returned from the Hills, places implicit trust in them. 200 men only will be armed until receipt of orders.

On the 3d June the Governor General forwards to the Court of Directors the proceedings of a Native General Court Martial on the trial of Salickram Sing, Jemadar, 70th Native Infantry. He was tried on the following charges :—First charge. In having begun a mutiny, and excited others to join in a mutiny in the Regiment to which he belongs, in the following instances :—1st. In having at Barrackpore, on the evening of the 5th March, 1857, in presence of Issuree Sing, Havildar of the Light Company, addressed Jemadar Sewbuccus Sing, of the Light Company 70th Regiment Native Infantry, in words to the following effect :—"My only hope is in you ; what do you say ? the sepoys may bite the new cartridges if they like, but I will not bite them ;" thereby endeavouring to persuade the said Jemadar and Havildar to combine with him in resistance to lawful authority. 2nd. In having at Barrackpore, on the evening of the same day, endeavoured to persuade the men of his Company to disobey the order they had received to thatch their huts without delay ; informing them that they need be no hurry in thatching their huts, as there would shortly be a disturbance, thereby inciting the men to resist authority. 3rd. In having, at Barrackpore, on the evening of the 8th March, 1857, had a meeting of non-commissioned officers and sepoy of his Regiment at his hut in the lines of the 1st Company 70th Regiment Native Infantry, in breach of the standing orders of the army and of the Regiment. Second charge. For conduct unbecoming an officer, in having made no report to his Commanding Officer of any intended disturbance, although he informed the men that a disturbance was intended, as set forth in the second instance of the first charge.

The Court convict him of mutiny and sentenced him to be dismissed from the service. The Commander-in-Chief concurs in the verdict, but considers mere dismissal from the service a very inadequate punishment for the crime of mutiny, and sends back the proceedings for revision of the sentence. The Court reassemble, and adhere to their original sentence.

On the 3rd June the Governor General forwards to the Court of Directors the proceedings of an European Court of Enquiry into the conduct of Lieutenant Colonel Mitchell, Commanding the 19th Native Infantry in connection with the occurrences which led to the disbandment of that corps. With these proceedings were also sent a series of correspondence, and the proceedings of a Court of Enquiry at Berhampore relating to the circum-

stances before and subsequent to the outbreak of that Regiment. The sentiments of the Governor General and the facts elicited at the Enquiry are recorded in the following Minute by His Lordship, concurred in by the Members of the Council : — “ A careful perusal of these papers, satisfies me that Lieutenant Colonel Mitchell in dealing with the outbreak of the 19th Regiment N. I. on the 26th February, did not shew the temper and firmness which is required of a Commanding Officer in such circumstances. I cannot doubt that, during the first part of the proceedings, Lieutenant Colonel Mitchell was, as some witnesses have testified, very angry. The inconsiderate threat, that if the men did not receive the cartridges he would take them to Burmah or China, where they would die, which is not denied by Lieutenant Colonel Mitchell, could not have proceeded from an officer speaking advisedly on a matter in which calmness and self possession were urgently needed. But it is especially in the time and manner of withdrawing the Artillery and Cavalry, which he had brought upon the ground for the purpose of compelling to obedience the Regiment which had then taken arms, that Lieutenant Colonel Mitchell's gravest error of a want of firmness consists. The evidence upon this point varies somewhat, but not materially. Lieutenant MacAndrew, Adjutant of the Regiment thinks, that the submission of the sepoys in lodging their arms was simultaneous with the withdrawal of the Artillery. Captain MacDougall did not see any men lodge their arms, fifty men of his own Company agreed to do so, but they did nothing more than sit down with their arms in their hands. Captain Manning did not see the arms lodged by the few men of his Company who had them. Captain Newhouse says that the arms were not lodged until after he saw the torches which accompanied the Artillery move off the ground. Lieutenant Colonel Mitchell's statement is, that he made no compromise with the men, and that before he ordered the guns and cavalry off, the native officers declared to him that some of the Companies had lodged their arms, and that the rest were doing so. It is no doubt true that there was no arranged bargain between Lieutenant Colonel Mitchell and his men ; but whereas it was his duty to listen to no proposals, and to accept no assurances, until he had satisfied himself, through his European officers, that every musket in the ranks was laid down, he did yield to representations made on behalf of a Regiment in mutiny with arms in its hands, and he did so in order to obtain from them that which he ought to have exacted as an act of obedience. It is impossible not to view the mode in which Lieutenant Colonel Mitchell withdrew the coercing force as a triumph to the mutinous sepoys. After what has passed in this matter,

I submit that the Government cannot feel that confidence in Lieutenant Colonel Mitchell's judgment and firmness which it ought to be able to repose in every officer commanding a Regiment, and I propose that the Commander-in-Chief be requested to appoint some other officer to raise and command the corps which will take the place of the disbanded 19th Regiment, and to find such other employment for Lieutenant Mitchell as His Excellency may deem suitable."

On the 5th June, the Governor General in Council in forwarding to the Court of Directors a continuation of the narrative sent on the 18th May, and a report from the Lieutenant Governor, North West Provinces, of the events which occurred there up to 22nd May, observes, that the tidings now sent are not without an admixture of hopeful intelligence, and that His Lordship confidently hopes that by the next mail he will be able to report that signal retribution has been inflicted on the mutineers and rebels at Delhi, and that the immediate result has been a perceptible tendency in all the districts to return, at no distant period, to quiet and good order. The Governor General also reports the death of General Anson, and the instructions sent to General Sir H. Barnard to assume command of the force proceeding against Delhi, and warning him of the necessity of attacking the insurgents as early as possible; the continuance of order and quiet, already much imperilled by excitement at the most important stations of Allahabad, Cawnpore, Lucknow and Agra, and in the adjoining districts, being dependent on the early and signal discomfiture of the rebels in arms at Delhi, and in its neighbourhood. The Governor General further informs the Court that, although Major General Reed, c. B. Commanding the Peshawur Division, by right of seniority, becomes Provincial Commander-in-Chief, His Lordship has, considering the emergency of existing circumstances, and the absolute necessity of having at the head of the army some officer of pre-eminent qualifications in point of knowledge of native troops and Indian experience, requested Lieutenant General Sir Patrick Grant to come to Calcutta, and assume command, temporarily, of the Bengal Army.

NARRATIVE OF EVENTS.

Allahabad, May 19th.—Every precaution taken to secure the fort and cantonments. Troops quiet and well behaved, 160 of the Oude Cavalry had arrived from Pertaubghur. City quiet and no fear of disturbance unless something occurs. *Feu de joie* prohibited on Her Majesty's Birth-day.—*23rd.*—70 artillery invalids arrived from Chunar and placed in the fort in which there are also 400 Seikhs of the Regiment of Ferozepore. On the recommendation of the Magistrate ladies and children are permitted to enter

the fort for safety. Two men, one apparently a discharged sepoy, were apprehended by some men of the 6th Native Infantry in their lines, trying to tamper with the sepoys. The men were imprisoned, and refused to give any account of themselves. The sepoys, who apprehended them, were immediately promoted. The 6th Regiment Native Infantry volunteered to be led against the insurgents at Delhi. The thanks of the Governor General were conveyed to the corps; and a General Order issued on the subject. All remains quiet; and the European troops are being pushed through to Cawnpore. 500 Irregulars authorized to be raised, the studs to supply undersized horses.

Agra.—(Taken from the Lieutenant Governor's report.) "There has been a great deal of excitement here. A parade of troops was ordered on the 13th, and the Lieutenant Governor spoke to them plainly and fully on the subject of the gross delusions that have so widely prevailed regarding the intention of the Government, to meddle with their religious feelings or habits. An offer was made that any of them may take their discharge, if they were not satisfied with the explanation and assurances just given. They all expressed their belief in the Lieutenant Governor's communications to them. They have undoubtedly been infected by a deep distrust of our purposes. Measures have been taken to strengthen the fort and to place in it some considerable amount of supplies. The European force is not to go into it excepting in the very last extremity. Portions of the Gwalior Contingent have been pushed forward to Agra as a reinforcement. The Grenadier Regiment of that force will occupy the station of Etawa on the 25th instant. The Maharaja insists on sending to Agra the whole of his body guard, a force more showy than useful; but calculated to have a calming effect on the public mind. The Electric Telegraph has been of the most invaluable use during the whole of this excited period." Two Companies of a Regiment at Agra having mutinied at Muttra, it was considered expedient to disarm the 44th and 67th Regiments on the 31st. The Lieutenant Governor in a Telegram of the 24th May states: "on the mode of dealing with the mutineers, I would strenuously oppose general severity towards all. Such a course would, as we are unanimously convinced by a knowledge of the feeling of the people, acquired amongst them from a variety of sources, estrange the remainder of the army. Hope, I am firmly convinced, should be held out to all those who were not ringleaders or actively concerned in murder and violence. Many are in the rebels' ranks because they could not get away: many certainly thought we were tricking them out of their caste; and this opinion is held, however unwisely, by the mass of the population, and even by

some of the more intelligent classes. Never was delusion more wide or deep. Many of the best soldiers in the army, amongst others of its most faithful section, the Irregular Cavalry, show a marked reluctance to engage in a war against men whom they believe to have been misled on the point of religious honor. A tone of general menace would, I am persuaded, be wrong." On the 25th May the Governor General telegraphs an order that no mercy should be shewn to any man who resists with arms the Commander-in-Chief's force; any man who has taken part in the murder of an European officer or other person; any ring-leader. Generally, a distinction should be drawn between the Regiments which murdered their officers and those which did not. To men of the latter, forbearance in the first instance, and hope of pardon, if they should show a claim to it, may be extended. On the 25th May the Lieutenant Governor issued the following proclamation:—"Soldiers engaged in the late disturbances, who are desirous of going to their own homes, and who give up their arms at the nearest Government (Civil or Military) post, and retire quietly, shall be permitted to do so unmolested. Many faithful soldiers have been driven into resistance to Government only because they were in the ranks and could not escape from them, and because they really thought their feelings of religion and honor injured by the measures of Government. This feeling was wholly a mistake, but it acted on men's minds. A proclamation of the Governor General now issued is perfectly explicit, and will remove all doubt on these points. Every evil-minded instigator in the disturbance, and those guilty of heinous crimes against private persons, shall be punished. All those who appear in arms against the Government, after this notification is known, shall be treated as open enemies." On the 26th May the proclamation is cancelled by Telegraph. On the 27th May Mr. Colvin earnestly requests that his proclamation may stand. On the 27th May the Governor General reiterates his order. On the 28th May Mr. Colvin reports that to cancel his order is to cripple his authority. On the 29th May an order is transmitted to the Commander-in-Chief, cancelling Mr. Colvin's proclamation, and on the same day the following remarks are communicated to Mr. Colvin by Government. "The proclamation issued by the Lieutenant Governor of the North West Provinces on the 25th instant is open to grave objection. By the 1st Clause; it allows all soldiers engaged in the late disturbances, who gave up their arms, to go to their homes unmolested." By the 3rd Clause, the operation of the first is limited, in so far as it is declared that "every evil minded instigator in the disturbances and those guilty of heinous crimes against private persons,

shall be punished;" but it is expressly said that only these shall be punished. In the course of these disturbances officers have been killed by their own men, or by the men of other Regiments, and it is known that two Regiments have made themselves especially infamous by such traitorous and murderous acts. It cannot have been intended by the Lieutenant Governor that the sepoys who participated in the murder of officers should escape punishment, yet it is at least doubtful whether under the proclamation they are not entitled to go free, as soon as their arms have been delivered up, and certainly their liberty could not be refused to them unless the term "private person;" crimes against whom are the only crimes denounced, be interpreted as including officers engaged in commanding their men. To stretch interpretations on the side of severity, in a matter affecting the lives of men, is not a right course; and it is especially necessary in the case of a proclamation of pardon, to avoid even the appearance of straining the plain meaning of such a proclamation in order to take lives of any persons who have surrendered upon the faith of it. But furthermore, upon any interpretation of this proclamation, the whole burden of proof that a mutineer has been guilty of the crimes selected for punishment is by this proclamation thrown upon the Government. It is not impossible that Government may be unable to prove one of these punishable crimes against any of those who surrender, and as the officer of Government to whom the sepoy may present himself to deliver up his arms cannot be expected to have any knowledge of the man's conduct, it is difficult to see how there can be any investigation whatever, even in the cases of the men known to belong to the Regiments by which the worst outrages have been committed. No power is reserved to detain a sepoy for the purpose of enquiring into his conduct before conceding to him permission to seek his home unmolested; and though this power might possibly be assumed in the case of individuals against whom suspicion should arise, it would be nothing less than a snare to use it against all the men of a particular regiment without having given notice of the intention to do so. There is then no reason why, with this proclamation in his hand, every sepoy of the 20th or 38th Regiments should not leave Delhi, present himself at the nearest Civil or Military post, and claim of right to go free. In whatever sense the proclamation may be understood by the Lieutenant Governor of the North West Provinces, no action can hereafter be taken under it which shall put the good faith of the Government of India above suspicion except such as would allow of the unimpeded escape of men who have murdered their officers. This would

be a heavy and lasting reproach to the Government of India, and a severe blow to the future discipline of the army. On this account it is unavoidable that the proclamation should be cancelled or superseded with as little delay as possible. But the Lieutenant Governor of the North West Provinces, has earnestly deprecated this course, as one which would weaken his power and discredit his authority. Seeing the difficulties with which the local Government at Agra has to deal, there is force in this appeal. Absolutely to annul an offer of pardon made, however unauthorised, by so high an authority as the Lieutenant Governor of Agra, might have a dangerous effect at this crisis ; and in the present aspect of affairs the Governor General in Council does not fail to see the advantages, as tending to hasten the suppression of the rebellion, and the punishment of the more heinous criminals, of the offer of a large measure of mercy to that portion of the mutineers, who, under any circumstances, if they were now to submit, would be leniently dealt with. The number of men who have committed themselves to the rebellion, puts the punishment of all quite out of the question. Moreover, the immediate revocation of the terms on which pardon has been offered, and the substitution, before there had been time to take advantage of such terms, of others less favorable, could not fail to increase the mistrust and fear which has possessed the minds of the sepoys in the North West Provinces who are still in the performance of their duty. It is therefore resolved, that the proclamation of the Lieutenant Governor shall not be set aside until the Commander-in-Chief, now advancing upon Delhi, shall approach the city, when His Excellency will be instructed to issue the following proclamation in the name of the Governor General in Council :—

“PROCLAMATION.

“The Governor General in Council, having reason to believe that amongst the mutineers in Delhi, there are many that have been constrained against their will or deceived into taking part in the proceedings of those around them, proclaims as follows :—Every soldier of a Regiment which, though it has deserted its post, has not committed outrages, will receive a free pardon and permission to proceed his home, if he immediately delivers up his arms to the Civil or Military authority, and if no heinous crime is shown to have been perpetrated by himself personally. This offer of free and unconditional pardon cannot be extended to those Regiments which have killed or wounded their officers, or other persons, or which have been concerned in the commission of cruel outrages. The men of such Regiments must submit themselves unconditionally to the

authority and justice of the Government of India. Any proclamation offering pardon to soldiers engaged in the late disturbances, which may have been issued by the local authorities previously to the promulgation of the present proclamation, will thereupon cease to have effect; but all persons who may have availed themselves of the offers made in such proclamations shall enjoy the benefit thereof. The Governor General in Council cannot conclude his remarks upon this subject without an expression of his regret that the Honorable the Lieutenant Governor should, without necessity for any extreme haste, have taken the step of issuing a proclamation of this grave character, affecting the reputation of Government in every part of India, and the discipline of the Bengal Army, without previous reference to him. The consequences have been very embarrassing. When the proclamation was issued, His Honor had a few hours before received a telegraphic dispatch showing that the general views of the Governor General respecting the treatment of the mutineers were such as to be wholly irreconcilable with the spirit of the Lieutenant Governor's proclamation. Against these views, as being in his opinion too severe for the existing position of affairs, he remonstrated in a telegraphic dispatch, to which in ordinary course His Honor might have expected an answer in a very few hours. The Governor General in Council is unable to concur with the Lieutenant Governor, in thinking that the terms of his proclamation are substantially consistent with the views expressed in that answer, and however that may be, the proclamation was issued without awaiting that answer. It would not have caused a delay of more than twenty-four or thirty-six hours, to have referred the proposed proclamation in terms to the Government of India, to which authority, in ordinary course, the decision of such an important military question belonged; and as the main object of the measure was to work upon the mutineers at Delhi, even if circumstances had been such as to render the delay of a telegraphic reference to the Governor General in Council inadmissible, the Commander-in-Chief, then on his march to that city, was the subordinate authority to whom the responsibility of acting in the matter without the order of Government should naturally have fallen. The point is one of so much importance that His Lordship in Council feels it necessary to explain himself to the Lieutenant Governor thus fully upon it, but he makes every allowance for the great difficulties of His Honor's position, and he is assured that His Honor acted as he judged best for the public interests in a time of danger."

Attack.—Occupied by a wing of 27th Foot; the occupation of that fortress by Europeans being considered of vital importance as securing the passage of the river.

Allyghur, 20th.—The four Companies of the 9th Native Infantry after behaving very well for some time, suddenly rose against their officers, who were compelled to leave them. No European injured. The treasury was plundered, and the prisoners in Jail liberated. The officers and civilians retired to Hattrass, eighty men of the 1st Gwalior Cavalry at Hattrass deserted, supposed to have gone to Delhi. Troops could not be spared from Agra to reoccupy Allyghur; but subsequently some Volunteers, headed by Captain Watson and accompanied by Mr. Cocks, c. s. proceeded to the place, and it is understood are there.

Azimghur.—All contained quiet up to the 26th, when some excitement showed itself, but the men were soon pacified. *5th June.*—A message from Benares reports that Azimghur has fallen. Four officers said to have been killed; names not given. Ladies all safe at Ghazepore, where they appear to have been sent. A party of Irregular Cavalry had previously been sent to bring away the treasure from both Azimghur and Goruckpore. It is not known whether the treasure left prior to the mutiny of the 17th Native Infantry.

Barrackpore.—The native troops continue quiet. As a matter of precaution, 400 men of the 84th Foot, were removed to Barrackpore. On the 25th May the native officers and men of the 70th Regiment N. I. on hearing of the dreadful massacres committed at Meerut and Delhi by certain mutinous native Regiments, and having heard also of disaffection said to exist in the ranks of some other corps in the Upper Provinces, petitioned to be allowed to proceed against the mutineers. The Governor General proceeded up to Barrackpore and addressed the men. "Native officers and soldiers of the 70th, your petition reached me yesterday, and I am come to answer it. I have received it with delight; not because I doubted your fidelity, for I know the trust that is reposed in you by your gallant Colonel, I know the high opinion which your brave General, with his long experience of the sepoys of Bengal, entertains of you; and I have myself marked your good and faithful conduct under recent bad example, when many fell away. I therefore felt sure of your loyalty. But your petition gives me pleasure, because it is an open contradiction of the rumour which has gone abroad, that the unfaithfulness of some Regiments, has tainted all within their reach. You have refuted the unjust suspicion nobly. Men of the 70th I will answer your petition. You have asked to be sent to meet the mutineers of Delhi. You shall go. In a few days, as soon as the arrangements can be made for your progress you shall proceed to the North West." The remaining Companies of the 31th Native Infantry subsequently volunteered to proceed

against the mutineers. The thanks of Government were expressed to the corps.

Berhampore.—All quiet.

Bareilly.—The news from this place is obtained entirely from private sources. On the news of the outbreak at Meerut reaching, the troops displayed considerable excitement. The officers, however, pacified their men, and all has continued in a satisfactory state up to the 27th, the date of the last letter. A great want is felt of Irregular Cavalry throughout the Doab and in Rohilcund. Colonel Troup, who was in temporary command of Bareilly, authorized the officer commanding the 8th Irregular Cavalry, to increase his Regiment by 500 men ; this has been sanctioned. One troop was raised in a few days ; and a second troop was nearly ready. The Irregular Cavalry men on leave in Rohilcund and neighbourhood, had been desired to place themselves under the orders of Collectors of districts.

Benares, 19th.—The 13th Irregular Cavalry brought into the station from Sultanpore. *Feu de joie* was prohibited on Her Majesty's Birth-day. Things appear to have been kept quiet by the firm and conciliatory conduct of the Civil and Military authorities. The Head Quarters of the Division is so far removed, the Brigadier Commanding has been vested with authority over the neighbouring stations, which formerly constituted the Benares Division. One hundred of Her Majesty's 10th Foot having arrived from Dinapore, the parties of Europeans who arrived by transit carriages and bullock trains are sent on towards Cawnpore as rapidly as possible.

Bolundshuhur.—The Sirmoor Battalion, 400 men, which had been ordered down by Canal, were detained by damage done to the locks. The Civil officers were obliged to leave the place, but returned on the 25th. Rampore Horse are employed keeping the road clear. *1st June.*—The country between Allyghur and this place being fast quieted.

Cawnpore, 21st.—Strengthened by 50 Europeans and 2 Squadrons of Irregular Cavalry from Lucknow. Considerable excitement among the native troops, particularly in the 2nd Light Cavalry. That corps had sent emissaries into the camps of the three Native Infantry Regiments asking if they would support them in the event of an outrage. *22d.*—Matters took a favorable turn about half past 7 p. m. yesterday. Up to that time it appears that an outbreak was most imminent, guns were placed in position and every preparation made to meet it. The men were, however, quieted by an address to them by their Commandant through some native officers. Two guns and 300 men of all arms brought in by Maharajah of Bittore. *25th.*—Report on what was considered good authority that there would be an outbreak on the

24th or 25th. All preparations made, but nothing occurred. 26th.—All tranquil. The disaffected, discontented by the efficient measures coolly but determinately taken to meet any outbreak that might be attempted, are sobering down. 29th.—Parties of Oude Irregular Cavalry sent out to Goosaingunge and Mynpoorie to keep the road clear and put down plunderers. Reports from Native Agents more cheering and satisfactory. The 50 men of the 32d Foot sent back to Lucknow, 71 of the 84th having arrived 31st.—All quiet. 4th June.—The Telegraph communication between Cawnpore and Agra interrupted. 50 of Her Majesty's 84th Foot sent to Lucknow. The Lucknow mutineers had crossed the Gauges and Mendie Ghaut, *en route* to Delhi. The party of Oude Cavalry sent to Mynpoorie to keep open the communication had mutinied and murdered their officers.

Chunar, 19th.—The fort was occupied by the Infantry of the Invalid Battalion and Veterans residing at the place. There being no room for the whole native guard usually on duty in the fort, three Companies, a portion was sent back to Benares. 20th.—Seventy artillery of the Invalid Battalion despatched to Allahabad.

Delhi.—Little authentic is known of the occurrences in Delhi. The Lieutenant Governor reported on the 22nd May that the retreating native Regiments from Meerut took their way to Delhi, where a few of the troopers first entered the town in straggling parties, harangued the mob and gained over to their cause the wing of the 38th Native Infantry, which was on duty in the town and at the palace. Several Europeans, Civil and Military, and ladies were at once cut down and massacred. The next step then seems to have been to murder all the Europeans in the Civil station, and very few escaped. The 38th, 54th, and 74th Regiments Native Infantry, were at the time at Delhi, with Captain DeTeissier's Horse Field Battery. The 74th Regiment joined without showing much alacrity in the rebel cause, and the Artillery men of the battery were only persuaded to take part with the mutineers when pressed by them in overwhelming numbers, and unable to extricate themselves from their power. A general massacre of all Europeans in and near the Civil and Military station of Delhi took place, but whether this was owing to the savage proceedings of the mutineers or to the truculence of the mob there is not yet the means of knowing. A number of officers were however enabled to escape from the general slaughter, and made their way with much difficulty through the surrounding villages to Meerut, occasionally treated with some kindness, but more frequently with neglect and some violence. Wherever the Goojur population predominated, they

plundered and murdered all parties ruthlessly. A Duffadar of the Gwalior Cavalry Regiment who had passed through Delhi four days previously, had reached Agra on the 29th. He describes the mutineers as robbing whom they please in the city. He says that a Regiment of Infantry, with four guns and some Cavalry, had left the city on the 23d to bring in the Rohtuck treasure. A part of the Meerut force was attacked near Ghazeeodeen Nuggur, by a large body of the insurgents from Delhi with five guns. The insurgents were thoroughly beaten, and dispersed with much loss; and the five guns, with ammunition and a great quantity of intrenching tools were taken from them. This victory, the Governor General in his letter to the Court of Directors forwarding the present narrative, says, will be of great value in proving to the mutineers and to the whole army, the prowess of the European troops, even in comparatively small bodies, and its occurrence just now is still more important, when, owing to difficulty in procuring sufficient carriage, and in moving the siege train which the Commander-in-Chief was organizing for the attack on Delhi, a delay of some days must take place before the attacking force can reach that fortress.

Dinapore.—Nothing has been heard from this place favourable or unfavourable. The European force consisted of half a Cawnpore battery, 3 guns and about 600 of Her Majesty's 10th.

Ferozepore, 13th May.—The 45th and 57th Native Infantry mutinied. The latter Regiment gave up its arms, while the former resisting, were attacked and dispersed by the Artillery, 61st Foot and 10th Light Cavalry which remained staunch.

Gwalior.—On the 28th May an outbreak of the troops of the Contingent was expected; preparations were made, and the ladies and families moved to the Residency. The Maharajah assisted with strong bodies of horse and foot, and placed a mansion attached to the place at the disposal of the ladies, where they would be safe. Nothing however occurred, and the ladies returned to cantonments the following day. The Contingent reported to be in a satisfactory state on the 1st June.

Hyderabad, (Deccan), 24th May.—The Resident recommended that the Electric Telegraph should be closed, as a means of communicating news from the North West Government considered it inexpedient to act on this. The proceedings at Delhi had caused considerable excitement in the city; but no disturbance was anticipated.

Jullunder.—The native troops are said to be obedient.

Kurnaul.—A party of the force from Umballah reached on the 21st. On the 24th a portion was pushed on to Paneeput; the rest of the force cannot get away till the 31st. The delay

caused by the want of carriage, and the non-arrival of the battering train from Phillour.

Lahore, 13th May.—The three Regiments of Native Infantry, 16th, 26th, and 49th and 8th Light Cavalry, were disarmed, and the men are doing duty without arms. The Sikh Sirdars are understood to have offered their services to Government. *3rd June.*—Sir J. Lawrence says all safe as yet in the Punjab; but the aspect of affairs most threatening. The whole native army are ready to break out; and unless a blow be soon struck, the Irregulars as a body will soon follow their example. Send for our troops from Persia, intercept the force now on its way to China, and bring it to Calcutta. Every European soldier will be required to save the country, if the whole of the native troops turn against us. Every precaution which foresight can dictate is being taken, to hold our own independently of the natives.

Lucknow, 23rd May.—Arrangements for the defence of the several posts have been completed, all considered safe, except from external influences. *25th.*—The Bed prayers concluded without any disturbances. *29th.*—Disturbances threatened outside. Tranquillity cannot be much larger maintained unless Delhi be speedily captured. *30th.*—An *emeute* in cantonments at 9 P. M., 25 of 7th Cavalry proved false. Several Bungalows burnt. Two or three officers killed, and the same number wounded; among the former is Brigadier Handscomb. Quiet in city, majority appear loyal. *31st.*—Most of the Bungalows in cantonments burnt. An outbreak of mutineers, half of 48th, about half of 71st and some few of 13th Native Infantry, with two troops of 7th Light Cavalry fled towards Seetapore. Sir H. Lawrence followed for seven miles with four guns, two Companies of 32d Foot, and 300 Horse. The latter evinced no zeal. 30 prisoners taken. Mr. Gubbins went out with a few Sowars and attacked the rebels at 9-30 P. M. *2d June.*—Colonel Birch moved out from Seetapore with a wing to meet the mutineers, but they turned towards the Ganges, and do not appear to have rallied. The districts are still quiet, except one point about 20 miles North West of Lucknow; but it is expected that they will be quiet when they hear that eight men have been hanged, and that more are about to suffer. The faithful remnants of the 3rd Infantry Regiments, and 7th Light Cavalry, amounting to about 700 men, are now encamped close to the detachment of Europeans. Lucknow is in a much better position. Some disturbance in the city, which was put down by the police.

Meerut.—The following account of the outbreak at Meerut is taken from the Lieutenant Governor's report of the 22nd May:—“On the afternoon of Sunday, the 10th May, the 20th Regiment Native Infantry, began the mutiny by seizing its arms simul-

taneously and rushing in a body as if to incite or attack the 11th Regiment Native Infantry. Lieutenant Colonel Finnis, of the latter Regiment was asked by his men to allow them to take their arms : he refused this request, and went forward to speak to the mutineers of the 20th Regiment Native Infantry. They immediately shot him down. The 11th Native Infantry then seized their arms, and united with the other corps. A Company of the 20th Native Infantry had been placed as guard over the jail after the troopers had been placed in it. A body of troopers of the 3rd Cavalry rushed to the jail to release their comrades : a party of the 6th Dragoon Guards were sent to oppose this movement, but appear to have lost their way in the confusion which had intermediately been produced ; for in the interval after the commencement of the disturbance, the Goojur inhabitants of the neighbourhood of the cantonments of Meerut rose *en masse*, plundering property, burning houses, and ferociously murdering every European they came across. In the universal disorder of the moment, amidst a general conflagration, the night came on, and the European force at Meerut was not able to act with any certainty or vigour against the retreating native Regiments. Around Meerut, the state of license in the villages, caused by the absence of all Government, spread for about twenty to twenty-five miles south and about the same limit, or somewhat more north ; within this belt, unchecked license reigned from the Jumna to the Ganges. The absence of any Light Cavalry, or effective means of scouring the country in this severely hot weather, paralyzed the attempts of the Meerut force to maintain any regularity or order beyond the immediate line of its pickets. The bungalows in the cantonments have nearly all been burned down, and all parties—officers, ladies, and children—were, and remain, collected within the enclosure of the Artillery School of Instruction, and in the several lines of barracks adjoining.” General Hewitt gives the names of the killed at Meerut, and of those saved from Delhi.

Moradabad.—The troops appear staunch. A party of 200 Sappers and Miners have been forced to lay down their arms, and clothing, and plunder ; date not given.

Mynpoorie, 22nd June.—120 men of the 9th Native Infantry mutinied, but did not injure their officers. The Civil officers were devoting themselves to save as much of authority as could be rescued from the insurrection. By the tact and excellent behaviour of Ensign Dekantzow, the men were kept back from any overt act, and finally quitted the station to join the men of the corps at Allyghur *en route* to Delhi.

Muttra.—The Bhurtpore troops occupied the post, but were

subsequently moved on to the road between this place and Delhi. On the 30th two Companies of Native Infantry (the relieved and relieving) mutinied and plundered the treasury.

Neemuch.—Empty bungalows burnt. Magazine occupied by wing of the Gwalior Infantry. 28th.—All quiet among the troops; a panic in the bazar.

Nusseerabad.—Artillery and 30th Native Infantry considered staunch; doubts about 15th Native Infantry. Col. Lawrence had sent to Deesa for 250 European Infantry, 3 guns, and a squadron of Cavalry, and 200 Native Infantry. 26th.—All quiet; but state of affairs unsatisfactory. The Assistant in charge of Ajmere writes to the Political Agent at Jeypore, under date the 29th, that he has just heard that the 15th and 30th Native Infantry and Artillery with six guns, had left Nusseerabad for Delhi, dressed in Hindoostanee style.

Umballah.—The Artillery and 2nd Europeans detained on the 25th for want of carriage. The Commander-in-Chief in a Telegram from Umballah of the 19th May to the Governor General states: "All quiet here. Affairs do not go on well; the feeling of the native army may be a little improved, but none can be trusted. The two Regiments here profess that they will go where and do what they are ordered; they express regret for having committed themselves for a moment. They have since behaved well; but our European troops will not act with the same confidence if they are with them; we cannot leave them behind without sufficient number of Europeans to control them. The country is very much disturbed. The communication with Meerut difficult. I hope this will be remedied, having such a force at Kurnaul, we cannot move at present for want of tents and carriage; it would destroy Europeans to march without both, and we have no men to spare. I see the risk of going to Delhi with such small means as we have, perhaps 2,500 Europeans, for should they suffer any loss it would be serious, having nothing more to depend upon in the North West Provinces, but it must be done. I have not heard from below Delhi, or Lieutenant Governor, it would be important to have his views upon the subject, for troops should be brought from Persia, and those going to China should be stopped at Singapore. I hope we may hold on till the crisis is past. We must not omit any means of increasing our European strength. Since this message was begun I have heard from the Chief Commissioner of the Punjab. He recommends strongly that an order be issued giving up the new cartridge. I have adopted this advice."

On the 27th May His Excellency the Commander-in-Chief General Anson died of cholera at Umballah.

Umritsur.—It is stated that the 59th Native Infantry do not object to the new Cartridges. A Company of the 81st Foot occupy Govindghur.

Since the dispatch of the mail of the 18th May the following European troops have reached Calcutta: A portion of Her Majesty's 35th Foot, about 380 men from Rangoon, the 1st Madras European Fusiliers, and a wing of Her Majesty's 64th Foot. The 1st Madras Fusiliers have been pushed on towards Cawnpore, by horse-dak, bullock-train and steamers, a portion having already reached their destination. A Company of Her Majesty's 84th had previously been pushed on, and the remainder are following by horse-dak and bullock-train. The 35th have taken the place of the 84th, at Barrackpore, and the 64th will start this day by steam, leaving a few men to follow by the bullock-train. The "*Punjab*" is expected daily with the remainder of the 64th, which will likewise be pushed on as speedily as possible. The *Coromandel* has just arrived with a Company of the 84th from Rangoon, and a Company of Artillery, it is understood. Sir Henry Ward has offered to send 500 men of the 37th Foot from Ceylon. Two steamers left this, one on the 23rd and the other on the 24th ultimo for Galle, and will bring back the wing of the 37th. A steamer and sailing vessel have also been dispatched from Bombay to bring troops from Galle. The 78th Highlanders may also be expected in another week or ten days from Bombay. A circular was issued on the 29th explaining that none of the new cartridges had been issued to native Regiments. This became necessary from the gross misunderstanding which prevailed on the subject.

On the 24th May, the Ramghur Battalion volunteered to proceed against the mutineers. The Governor General in a General Order thanked the Battalion for this demonstration of their loyalty. On the 5th June a General Order was issued expressing the thanks of the Governor General for the zealous and loyal conduct of the Calcutta Militia in volunteering to proceed wherever their services may, at the present moment, be required.

The Governor General on the 19th June forwards to the Court of Directors in continuation of the narrative sent on the 6th June further intelligence and papers relative to the disaffection prevailing in the Native Army.

All communication by dak, as well as by Electric Telegraph, from and above Allahabad having been entirely cut off since the 6th June, very little information has been received of the events since that date.

Allahabad.—The 6th Native Infantry mutinied on the 6th at 9 P. M. They were joined by the three troops of Oude Irregular Cavalry, and the town's people. Thirteen European

officers are reported to have been murdered. The rest, with some Civilians, had taken refuge in the fort which was occupied by some invalid Artillery and the Regiment of Ferozepore Seikhs. A detachment of 1st Madras Fusiliers of between sixty and eighty men reached the fort the following day. Many of the Civil officers and European inhabitants are missing. About 350 Europeans of the 1st Madras Fusiliers, occupy the fort while the Seikh Regiment is at the Steamer's Ghaut protecting it; 400 more of the 1st Fusiliers must have reached by steam on the 16th or 18th. Town in possession of insurgents. 16th.—Col. Neill arrived all safe on the 11th, and Major Stephenson with 100 men on the 12th; party of 30 by steamer on 13th; 279 Fusiliers and 7 officers now here. All Seikhs outside; all guarded inside the fort by Europeans. Horses or bullocks with drivers much required for Artillery, to move out to attack enemy in cantonments. Bridge of boats retaken on 12th, and now held with picquets on opposite sides of river on Benares road. Enemy attacked daily. Heavy loss can best be inflicted with Artillery properly horsed or bullocked. Col. Neill could easily thrash the enemy. 500 Europeans, the least complement now, with half battery at least for this place, and all above 500 men, will be pushed on to Cawnpore. Allahabad now quite safe. The last report from Cawnpore was, it was in our hands. Nothing heard from Sir H. Wheeler: the road from Allahabad to Cawnpore quite closed.

Agra.—Appears to be all safe up to the 10th instant.

Allyghur.—The mutineers at Lucknow having crossed into the Doab and appeared at Allyghur, the detachment of Volunteers were forced to quit the place temporarily on the 8th.

Azimghurh.—The only officer killed is Lieutenant Hutchinson, Quarter Master of the 17th Regiment Native Infantry, who is said to have fallen in trying to save the post guns. The officers and ladies had arrived at Ghazee-pore.

Fort William and Barrackpore.—Major General Hearsey on the 8th and 9th June reports that the 43rd, 70th and 34th Regiments of Native Infantry, have voluntarily come forward and petitioned to be armed with the new Enfield Rifle. The Governor General expresses his great satisfaction at the request of the Regiments, proving as it does that the men consider there is nothing objectionable in either the rifles or the cartridges to their caste or religion; but desires to inform the Regiments that the supply of the new rifles received is so small that their request cannot at present be complied with. Major General Hearsey, having reason to believe that the native troops intended to rise on the night of the 13th sent for European troops in order to disarm the Regiments. This was quietly carried into effect on the

evening of the 14th, Sunday; at the same time the whole of the native troops, except the body guard, in Fort William, Calcutta, and the neighbourhood, were quietly disarmed. At day break on Monday morning, the 15th, a detachment of European troops made a prisoner of the King of Oude, his Prime Minister, and others. These are now lodged as prisoners in the fort. A sepoy of the 43d Regiment having given information regarding a man, said to be a follower of the King of Oude, having tried to tamper with the sepoys in the fort, arrangements were made to secure the man, who had agreed with the sepoy to come again on the night of the 13th. The man came and was secured. He was tried by a Court-Martial on the 14th and sentenced to death. Unfortunately, during the night of the 14th, he effected his escape.

Benares.—On the news of the mutiny at Azimghur reaching Benares, a rising of the 37th Native Infantry was anticipated, and the authorities determined to disarm that corps. Accordingly the European troops and battery were paraded and marched on the lines of the 37th. The Regiment of Loodianah (Seikhs), with the Irregular Cavalry, and one squadron of the 13th were also under arms. On the Europeans approaching the 37th, that corps opened fire on them, which was returned by the European Infantry and Artillery. As the Regiment of Loodianah was advancing the Resaldar of the Irregular Cavalry rode up to the corps and called out that his men had mutinied. Some shots were fired by the Irregular Cavalry, on which the Seikhs paused, turned round, some firing towards the Cavalry, others towards the Europeans, on which the guns were turned on the Seikhs, who soon dispersed. The 37th in the mean time had been dispersed, and their lines were set on fire. The men of the 37th, the Seikhs, and Irregular Cavalry, passed through cantonments, and took the road to Jaunpore. Some of the Seikhs remained faithful, and protected the treasury, while others protected their officers. Some of the Irregular Cavalry also proved faithful, the party sent to Goruckpore and Azimghur for treasure having brought it in safety, and having since been usefully employed in clearing the road to Allahabad. The district and town appear pretty quiet, and matters appear satisfactory up to the latest date, the 18th.

Berhampore.—All quiet; a detachment of Europeans from Barrackpore has been sent to insure the safety of the station. The 63rd N. I. at Berhampore having volunteered to be employed against the rebels, was thanked by the Governor General for their loyalty.

Cawnpore.—Nothing heard from this place since the 4th instant.

Chunar.—All safe.

Delhi.—A second action was fought on the 31st, near the Hindon. Brigadier Wilson's force, reinforced by Sirmoor Battalion, and some reinforcements from Meerut, was to join the Umballa Column on the 5th *via* Bhagpoot Ghaut. The force reached Delhi on the 8th, and drove the rebels dispirited into the town, capturing the heights in front of Delhi and twenty-six guns.

Dinapore.—All quiet up to the 15th. Major General Lloyd reported that the 7th Regt. N. I. volunteered to go against the mutineers. The thanks of the Governor General were conveyed to the Regiment for their loyalty and offer of services. On the 3rd June General Lloyd forwarded the following Circular Memorandum which he issued for the guidance of officers Commanding Stations and Posts in the Dinapore Division : "With reference to the present disturbed state of public affairs, officers commanding at stations and posts within the division, are hereby authorized, should emergency arise, to act at once, for the good of the service, upon their own judgment and responsibility, duly reporting the measures they may adopt for the information of the Major General Commanding, and of the Brigadier at Benares, as regards commands in the neighbouring districts." The Governor General approved of the Circular.

Dacca.—On the 12th June, a detachment consisting of 100 European seamen from the war steamers *Punjab* and *Zenobia* with two armed boats and two field pieces were sent to Dacca as a precautionary measure.

Gya.—A detachment of 120 Europeans sent to protect the treasury.

Hansi and Hissar.—The Hurrianah Light Battalion is said to have mutinied.

Jaunpore.—The detachment of the Sikhs, on the mutineers from Benares arriving, murdered their officer, Lieutenant Mara, and other Europeans, seized the treasure, and proceeded into Oude, *via* Fyzabad, Jemadar of the Sikhs having been elected Commandant.

Lucknow.—Nothing heard since the 4th instant.

Meerut.—Major General Hewitt reported as the latest news from Delhi was that the mutineers were divided into two parties, Mussulman and Hindoo, who had come into collision, and blood had been spilled. The four Companies of the 9th Native Infantry with the treasure from Bolundshuhur and Allyghur are said to have joined the mutineers. The Sirmoor Battalion have behaved well under Major Reid, in making their way to Bolundshuhur against great difficulties from the destruction of the Canal works, they were too late to save the treasure; but the re-

tribution inflicted on the village, where the pillaged Government property was found, had contributed to the tranquillization of the district. General Hewitt forwarded a letter to his address from the Commander-in-Chief of the 23d May containing instructions with respect to the movements of the force from Meerut required to join the column advancing from Umballah towards Delhi. The two forces to form a junction at Bhagpoot on the 5th June.

Mynpooree.—On the 29th May, the Lieutenant Governor forwards an extract from a report from the Magistrate of Mynpoorey containing an account of the occurrences attending the mutiny of the three Companies of the 9th Regiment Native Infantry at that station on the night of the 22d May; and brings to the notice of the Governor General the marked gallantry and devotion to duty of Lieutenant DeKantzow of that Regiment on that occasion. The Governor General expresses his admiration of Lieutenant DeKantzow's conduct and thanks him.

Mirzapore.—All quiet. Treasure removed. The Rewah Rajah has offered 600 Cavalry, 500 Infantry, and five guns. These have been accepted.

Nowgong.—The wing of the 12th Native Infantry and native Battery have mutined. Particulars not known.

Neemuch.—The troops at the station reported to have mutinied, as well as the Cavalry of the Malwa Contingent. The Infantry of the Contingent at Mehidpore said to be true.

Umballah.—On the 17th May the Commander-in Chief reports that he arrived at Umballa on the 15th and ordered the following movements: The 2d European Fusiliers from Soobathoo to Umballa, and the Nusseerec Battalion to Phillour, to escort a third class siege train and ammunition to Umballah. Six Companies and Head Quarters of the corps of Sappers from Roorkee to Meerut, and the 4th Irregular Cavalry at Hansi to be in readiness to proceed wherever required. To restore the confidence of troops not mutinied, a General Order, intimating that sepoys would not be required to use objectionable cartridges was issued; and Commanding Officers were ordered to suspend all target practice and firing with blank ammunition. The European Regiments at Umballa are weak in point of numbers. Not more than 1800 effective men in the three corps of Infantry. Accounts recently received are more favorable than those of an older date. The troops concentrated at Umballa, though unable to move for want of carriage, are exercising a powerful influence. A detachment to leave this evening to Kurnaul to maintain order and reassure the inhabitants. The Putteealla Rajah has rendered considerable assistance and so has the Jheend Rajah. In another letter,

the Commander-in-Chief states that circumstances also have taken place at Umballa which render it is impossible to rely on the perfect fidelity of the 5th and 60th Regiments of Native Infantry and arrangements were accordingly made to meet the existing state of affairs. Sir John Lawrence in submitting a report sent to him by the Commissioner, Cis-Sutlej States, relative to the recent fires in the cantonments of Umballah, observes that these combinations, arsons and emeutes are all caused by the disaffection which has arisen from the introduction of the new cartridge, and that nothing but the giving up the use of the new cartridges will put a stop to the present state of affairs. If this be not done and made generally known, the disaffection which was pervades the whole of the native Regular Army will extend to the Irregulars. The list of fires which accompanied the reports shews that they have been directed chiefly against property either belonging to officers and men attached to the depot, or assigned to them for shelter during the hot months. The Government also have been considerable sufferers and these two facts are sufficient to shew that the musketry depot is obnoxious to the incendiaries, as well as the Government which authorized its establishment.

Calcutta.—The European troops arriving in Calcutta are being pushed up as quickly as possible. The whole of the Madras Fusiliers must now be at Allahabad, and the 84th have passed beyond Benares, as also a portion of the 61th, the last of the 78th Highlanders leave by bullock train to-morrow, the 20th, when the wing of the 37th will be despatched. One European battery left by steam this morning, and another is preparing to follow. The detachment of the Royal Artillery will also be sent up by bullock train. On the 4th June an Act No. XI. of 1857 was passed by the Governor General of India in Council providing that All persons owing allegiance to the British Government, who, after the passing of this Act, shall rebel, or wage war against the Queen, or Government of the East India Company, or shall attempt to wage such war, or shall instigate or abet any such rebellion or the waging of such war, or shall conspire so to rebel or wage war, shall be liable, upon conviction to the punishment of death, or to the punishment of transportation for life, or of imprisonment with hard labour for any term not exceeding fourteen years; and shall also forfeit their property and effects of every description : Provided that nothing contained in this Section shall extend to any place subject to Regulation XIV. of 1827 of the Bengal Code.

All persons who shall knowingly harbour or conceal any person who shall have been guilty of any of the offences mentioned

in the preceding Section, shall be liable to imprisonment, with or without hard labour, for any term not exceeding seven years, and shall also be liable to fine.

The Act moreover enables the local Governments to issue Commissions for the trial of such persons, or to disarm any class of the population.

On the 6th June an Act No. XIV. of 1857 for making further provision for the trial and punishment of persons who endeavour to excite mutiny and sedition among the forces of the East India Company, and also for the trial of offences against the State, was passed and published, together with the following General Order: "In pursuance of Act No. XIV. of 1857 passed this day, the Governor General in Council is pleased to authorize every General Officer Commanding a Division, every Brigadier, and every officer commanding a station, being the senior officer on the spot, to appoint General Courts Martial under the provisions of the said Act, as occasion may require for the trial of any person or persons who may be charged with any offence against the aforesaid Act, or against Act No. XI. of 1857, if such offence require in his judgment, to be punished without delay, and to confirm and carry into effect, immediately or otherwise, any sentence of such Court Martial.

General Courts Martial assembled under this authority may consist wholly of European Commissioned officers, or wholly of Native Commissioned officers, the number of officers not being less than five. The officer appointing the Court Martial shall determine whether it shall be composed wholly of European officers, or wholly of native officers, or partly of European and partly of native officers."

On the 1st June, the Governor General in Council reports to the Court of Directors that in consequence of the unhappy events which have occurred in the North Western Provinces, he thought it proper to publish the following Proclamation: The Governor General in Council has warned the army of Bengal, that the tales by which the men of certain Regiments have been led to suspect that offence to their religion, or injury to their caste, is meditated by the Government of India, are malicious falsehoods. The Governor General in Council has learnt that this suspicion continues to be propagated by designing and evil-minded men, not only in the army, but amongst other classes of the people. He knows that endeavours are made to persuade Hindoos and Mussulmans, soldiers and civil subjects, that their religion is threatened secretly, as well as openly, by the acts of the Government, and that the Government is seeking in various ways to entrap them into a loss of caste for purposes of its own.

Some have been already deceived and led astray by these

tales. Once more, then, the Governor General in Council warns all classes against the deceptions that are practised on them. The Government of India has invariably treated the religious feelings of all its subjects with careful respect. The Governor General in Council has declared that it will never cease to do so. He now repeats that declaration, and he emphatically proclaims that the Government of India entertains no desire to interfere with their religion or caste, and that nothing has been or will be done by the Government to affect the free exercise of the observances of religion or caste by every class of the people. The Government of India has never deceived its subjects. Therefore the Governor General in Council now calls upon them to refuse their belief to seditious lies. This notice is addressed to those who hitherto by habitual loyalty and orderly conduct have shown their attachment to the Government, and a well founded faith in its protection and justice. The Governor General in Council enjoins all such persons to pause before they listen to false guides and traitors, who would lead them to danger and disgrace.

A few days after the publication of the Proclamation, separate addresses by different classes of the community were presented to the Governor General, expressing their sorrow and concern at the mutinous conduct of a portion of the Native Army, and the disastrous consequences which have resulted therefrom, and offering to afford Government all the assistance in their power in the preservation of order and in the protection of the inhabitants of Calcutta. The Governor General in thanking the members of the Calcutta Trade Association for their offer of aid, observed that their services would be very valuable as special Constables, and suggested that those who were willing so to act to register their names at the office of the Commissioner of Police who had been authorized to enrol them. The Association was however, assured by His Lordship that there was no apprehension whatever of any riot, insurrection or disturbance amongst any class of the population of Calcutta, and that if any should occur the means of crushing it utterly and at once were at hand. The Governor General also stated that disaffection had not been evinced by all the sepoy Regiments in India as assumed by the Association, there being many soldiers and many Regiments in the Bengal Army who have fairly withstood the evil example and wicked Counsels which have destroyed the fidelity of the few Regiments that have mutinied.

To the French Consul, and other French Residents at Calcutta, the Governor General in returning his sincere acknowledgments hoped there would be no occasion to call for their services. Every thing was quiet within 600 miles of Calcutta. The

mischievous caused by a passing and groundless panic, had already been arrested; and in the course of a few days' tranquillity, and confidence would be restored throughout the Presidency.

To the Native Community, Hindoo and Mussalman, the Governor General expressed his gratification at the loyalty, and good sense displayed by them at the present juncture in declaring their abhorrence, and the unqualified and just condemnation of the mutinous conduct of some of the Native Regiments, and remarked that the steadfast policy of the British Government in India has been and ever will be to observe a strict neutrality in matters of faith, to respect all scruples of caste, and to leave its subjects, of every creed, and class, to the free and uninterrupted enjoyment of their religious opinions and observances. The Native Community was also informed that decisive steps were taken for the suppression of the revolt, the punishment of those concerned in it, and the restoration of peace and order in the disturbed districts.

The European and other Christian inhabitants of Calcutta having offered to serve as Volunteers for the protection of the city, the Governor General in a Notification issued on the 12th June, invited all persons willing to serve in the corps of Volunteer Guards of Calcutta, either as horsemen or on foot, as members of that force, to enrol their names at the office of the Town Major in Fort William.

On 4th July* the Governor General in Council continues the narrative.

Agra.—All right up to 15th June.

Allahabad.—Lieutenant Colonel Neill arrived on 11th June. He immediately attacked the enemy, but was hampered by drunkenness, wine and spirits being sold to the Europeans at four annas a bottle. This was plundered from various public and private stores. The liquor was destroyed by order of Colonel Neill, the Sikhs turned out of the fort, and on the evening of the 14th he cleared Kydgunge. The Sikhs followed very rapidly, and the enemy evacuated the city that night. Some villages were destroyed and a system of Patrols organized to encourage the country people to bring up supplies. The women and children were all sent away in the steamers which took up the Fusiliers. Colonel Neill reports the cholera in the fort. Brigadier General Have-lock arrived on the 30th June, and a detachment consisting of 400 1st Fusiliers, 300 Sikhs, 28-pounders manned by Artillery Invalids, and 120 Cavalry started on that day for Cawnpore.

Attack.—No intelligence.

* There is some mistake about the date. The narrative is marked 19th June, but it refers to the former narrative of that date, and brings events up to 4th July.

Azinghur.—Has continued occupied by Mr. Venables, Indigo Planter with 100 men of 6th N. I. and 50 of the 12th Irregular Cavalry.

Banda.—The Europeans were forced to quit the station on 14th June, two Companies 1st N. I. having taken possession of the treasury. All arrived at Nagode.

Barrackpore.—All quiet. The senior officer present with the 70th N. I. begged that that Regiment might not be disarmed, as the threat said to have been used "let us get beyond Pultah, and then see what we will do" must have been uttered by a bad character. The General of Division however remarks that the men ought to give the bad character up. The Governor General in Council agrees, and refers to information that respectable men in the corps had warned the officers not to take their wives. Desertions to the number of 151 had taken place from the 43rd N. I. of these 56 returned and were allowed to join their guards, and 1 Naick and 12 sepoys were brought back by the Civil power. The Naick was hung.

Barcilly.—On 23rd May Brigadier Sibbald reports that the men at Barcilly are quiet, but labouring under a great fear of punishment. On 30th May the Lieutenant Governor authorises the Brigadier to assure the troops in Barcilly that nothing has occurred to shake his confidence in their loyalty. On 31st May the troops mutinied. They consisted of a Horse Field Battery, No. 15, the 18th and 68th N. I. and 8th L. C. The officers Brigadier Sibbald excepted were allowed to escape to Nynsee Tal which was protected by the Goorkhas.

Benares.—All quiet. Station occupied by 200 Europeans, European Light Field Battery, 800 Sikhs and a few of the 13th L. C.

Berhampore.—A sowar of the 11th released some deserters from 43rd N. I. and tried to excite the troops to mutiny. He was sentenced to transportation for life.

Bhaugulpore.—In the district at Rohnee four men attacked Sir Norman Leslie, Major Macdonald and Assistant Surgeon Grant. The men were three of them sowars of the 5th L. C. The attack was made on the 12th. On the 15th the men were tried by drumhead Court Martial and hung.

Cawnpore.—It is understood that 2nd L. C. and 1st N. I. mutinied on 4th June, and were joined by Nana Dhoondée Punt of Bithoor. The first detailed intelligence was received from Nerput, Opium Gomashtha of Cawnpore. He said the Nana had murdered all the Europeans he could find in the city, and also 126 men, women and children, who came in a boat. The English camp kept up its fire, but the troops inside were badly off for provisions. This occurred on 12th June.

On 28th June Sir H. Lawrence writes that the force had been destroyed by treachery. The Nana swore to protect them, then murdered all in their boats. Story is considered improbable.

Delhi.—The Umballa column was reinforced on June 6th by troops under Brigadier Wilson. The mutineers were defeated on the 8th with the loss of 26 guns. On the 14th June it was reported the troops had taken the palace with a slaughter of 7,000 men.

Ghazee-pore.—65th N. I. appear to be behaving well. There was a detachment of H. M.'s 64th at the station.

Gwalior.—The Contingent mutinied on the 16th. Scindia escorted some of the officers to Agra.

Goruck-pore.—The Oude Government have lent 3,000 Goorkhas who were to leave on the 29th.

Hansi and Hissar.—The Hurrianah Light Infantry mutinied, but officers escaped to Thanesur and Sirsa.

Hyderabad.—1st Hyderabad Cavalry refused to fight against men of their own creed. The Hindoos separated themselves from the Mussalmans. The men seeing force arrayed against them calmed down. General Woodburn with a moveable column was however ordered by the Resident to proceed to Aurungabad. He arrived on 24th June. The 1st Cavalry were ordered on foot parade. The good men remained. The bad fled, and commenced saddling their horses, on which they were fired on and dispersed.

Jhansi.—Troops had mutinied, and fears were entertained for the Europeans.

Jullundur.—Native Infantry mutinied on 8th June, and were joined by 5th Native Infantry at Phillour. Pursued by a force from Jullundur and troops of the Aloowalla Chief.

Lucknow.—The mutineers were gradually closing in. The Residency, Muchee Bawun, and cantonments had been strengthened. All well up to 30th June.

Mynpoorie.—Held by a detachment of 1st Gwalior Cavalry under Major Raikes.

Nagpore.—The Irregular Cavalry of the Nagpore force were disarmed on 23rd June. The Seetabuldee Hill had been fortified, and the European Artillery from Kamptee moved there. Some native officers of the Irregular Cavalry were hung on the 30th June. The 1st Irregular Infantry took part in the proceedings.

Neemuch.—The troops mutinied on 3rd June, and proceeded to Delhi. The officers, who escaped, returned, and on 20th all was quiet.

Oude.—The troops at Seetapore mutinied on 4th June, those at Fyzabad and Secrora on the 8th, those at Sultanpore and

Persadipore on the 10th. The troops at Baraitch and Gonda went also, but when is not known. Officers not killed escaped to Allahabad. The fate of those at Seetapore not known.

Peshawur.—40 men of 55th Native Infantry blown from the guns for mutiny.

Rewah.—The Maharajah placed his forces at our disposal. Lieutenant Osborne sent 400 Infantry, 400 Cavalry and 5 guns to Unamapatam, whence they could command the Saugor, Dumoh, and Jubbulpore stations, and another force to the Kuttra Pass.

Saugor.—All quiet on 1st July, and force of 600 men from 31st and 42nd and 5th Irregular Cavalry marched against Boondelas and routed them.

On 21st July the Governor General in Council continues the narrative.

Agra.—The Neemuch mutineers approached and the Europeans were compelled to enter the fort. The force comprised 650 European Infantry and Artillery, 200 or 300 Volunteers, the Kotah Contingent and some Kerowlee Horse. The Kotah Contingent however mutinied one mile out of town and fired on its officers. The Kerowlee Horse also left, but the Europeans marched on and defeated the enemy but were obliged to retreat for want of ammunition. Agra was virtually in a state of siege on 7th July, and Mr. Colvin incapacitated for business by a complaint of the head.

Allahabad.—Col. Neill has been appointed a Brigadier General. General Havelock's column left Allahabad on 7th July, and on 12th July defeated the insurgents before Futtehpore, taking eleven guns. Not a European was touched. The enemy's strength was 2 regiments of Cavalry, three of Infantry, and eleven guns. The result says the Brigadier General is to be attributed to "the fire of British Artillery, exceeding in rapidity and precision all that the Brigadier General has witnessed in his not short career, or to the power of the Enfield rifle in British hands, and to British pluck, that quality which has survived the revolution of the hour, and gained no intensity from the crisis, and to the blessing of Almighty God, and to the most righteous cause of humanity, truth and good Government in India." On 14th, General Havelock was compelled to disarm 13th and 3rd Irregular Cavalry, but on 15th again beat the enemy at Pandoo Nuddy, taking four guns. Brigadier General Neill left Allahabad for Cawnpore by dak on 16th July.

Banda.—The remaining officers of the 12th N. I. were safe with the Nawab of Banda on 29th June.

Barrackpore.—A detachment of seamen have been placed in Fort William to serve as Artillerymen.

Bareilly.—Col. Troup reports on 10th June that on 20th June the Commissioner wrote to him mentioning the intention of the 68th N. I. to mutiny on that day. This was confirmed by a Havildar Major of the Regiment. He armed all the officers, and the 8th Cavalry turned out apparently in heart and spirits. The day passed quietly, but on 31st June the men rose, the 68th firing on the officers in their bungalows. The officers were saved by some of the 8th I. C. who rode off with the surviving officers and ladies to Nynce Tal. The native officers were promoted. Seven gentlemen of the station were known to have been murdered.

Cawnpore.—Brigadier General Havelock retook Cawnpore on 16th July. The Nana had murdered all the women and children, and retreated to Bithoor, blowing up the magazine. The British loss was about 70, but the action which lasted 140 minutes was a complete victory.

Delhi.—Sir H. Barnard, K. C. B. was attacked on 30th May on the bank of the Hindun. The mutineers were driven back with a loss of five guns, some carriages and ammunition. The besiegers lost eleven killed, nineteen wounded and two missing. On 31st May the enemy again attacked, but were driven back with loss. The besiegers lost 12 killed and 12 wounded. Major General T. Reed, C. B. joined the force on 8th June. The total force in camp was "4 guns, 2nd Troop, 1st Brigade; 2nd and 3rd Troops, 3rd Brigade Horse Artillery; 3rd Company, 3rd Battalion, Artillery, and No. 14 Horse Field Battery; 4th Company, 6th Battalion, Artillery; Detachment Artillery Recruits; Head-quarter's Detachment Sappers and Miners; Her Majesty's 9th Lancers; two Squadrons Her Majesty's 6th Dragoon Guards; Head-quarters and six Companies 60th Royal Rifles; Head-quarters and nine Companies of Her Majesty's 75th Regiment; 1st Bengal Fusiliers; Head-quarters and six Companies 2nd Fusiliers; Sirmoor Battalion." On June 8th, Sir H. Barnard carried an entrenched position at Badulee-ke-Serai, and drove the enemy despite a most determined resistance within the walls of Delhi. He captured twenty-six guns. The natives vied with the Europeans in zeal. Only one officer was killed, Colonel Chester, Adjutant General of the Army.

Indore.—Holkar's troops rose on 1st July, and attacked the Residency. The Europeans escaped to Sehore.

Jhansi.—It is feared that all the Europeans have been murdered.

Jubbulpore.—The Commissioner's house fortified, but safe up to 10th July.

Jullundur.—"The 36th and 61st Regiments mutinied on

the 4th June, and with a few men of the 6th Light Cavalry, proceeded to Phillour, where they were joined by the 3rd Native Infantry. These corps crossed the Sutlej a little above Loodianah, and eventually entered that town, from which they were driven by a party from Jullundur—part of Her Majesty's 8th Foot, and some European and Native Artillery, and some of the 6th Light Cavalry."

Lucknow.—On 30th June, Sir H. Lawrence went out with 200 of the H. M.'s 32nd, 40 Sowars, and 11 guns to attack insurgents. The Sowars and Artillery revolted, and the Chief Commissioner was compelled to retreat. Sir H. Lawrence died on the 4th July from wounds. Provisions were in store for six weeks.

Mhow.—The troops, right wing 1st L. C. and 23rd N. I. mutinied on 1st July, burnt cantonments, and murdered several officers. The remainder are in the Arsenal with European Artillery. Holkar's troops are said to have moved on Delhi. Holkar himself staunch.

Nagpore.—Three Rcssaldars executed with the best effect. Great quantities of arms have been delivered up. The city remained quiet.

Saugor.—The 42nd N. I. mutinied on 3rd July, and part of 3rd Irregular Cavalry. The European Artillery and officers had previously provisioned the fort. The 31st and some of the 3rd Irregulars without their officers marched out and defeated the mutineers. The Government ordered a report on the circumstances which induced the officers of a Regiment thus proved to be faithful to quit it.

MADRAS BUDGET OF 1856-57.

Madras Records, No. XXXVIII.

ON the 19th March, 1856, Mr. J. D. Bourdillon, Secretary to the Government of Fort St. George, Public Works Department, submitted Statements Nos. 1 and 2 of projects of Public Works proposed to be undertaken or continued in 1856-57.

The works in No. 1 are beyond the competence of the Madras Government to sanction. This number contains fifty-eight new projects involving an estimated aggregate outlay of Rs. 60,13,692, of which the sum of Rupees 26,93,577 is proposed to be expended in 1856-57. Out of the fifty-eight projects requiring the sanction of the Government of India, eight were included in the Budget of 1855-56. The remaining fifty are separately re-

ported on in the Budget under review, and are treated under the following classification :—

IRRIGATION WORKS.

- No. 45. Annicut over the Tambrapoorny River.
- „ 17. Continuation of the Southern High Level Channel from the Kistnah Annicut.
- „ 18. Kistnah Annicut Channel from Vallahbapoorum, to tide water on the Southern Bank.
- „ 32. Poiney Annicut Channel.
- „ 47. Calingaroyen Channel in Coimbatore.
- „ 1. Embanking the Mahanuddec in the Ganjam District.

NAVIGATION WORKS.

- „ 55. Extension of East Coast Canal from the Palaur to the Pondicherry Frontier.
- „ 54. Improving the Coast Canal between Madras and Ammuncovil.
- „ 14. Building two locks and Calingulahs in the Ankeed Canal and embanking the Weyairoo.
- „ 10. Increasing the width of the Palcole Canal with locks at Nursapore and Maurootair.
- „ 50. Cutting a Canal from the Tuddry River to Coomptah.

TRUNK ROADS.

- „ 29. Additional Metalling to part of Trunk Road, No. 1. .
- „ 28. Raised causeway and bridges over the Puninggardee Backwater.
- „ 20. Masonry works between Covoar and Moodegunder River.
- „ 5. ——— works between Soobaram and Chittavalsah.
- „ 4. Formation of the Road between Chittavalsah and Chicacole.
- „ 3. Completing the road between Chicacole and Sunthoshapoorum.
- „ 2. Construction between Sunthoshapoorum and Dendagudda.
- „ 21. Masonry works in completion of Trunk Road, No. 7.
- „ 35. Bridge over the Pennaur on Trunk Road, No. 8.
- „ 36. ——— over the Vellaur on Trunk Road, No. 8.
- „ 39. Additional Metalling between Oolundoorpett and Samiaveram.
- „ 37. Bridge over the Pennaur on Trunk Road, No. 9.
- „ 38. ——— over the Guddilum on Trunk Road, No. 9.
- „ 23. Masonry works on Trunk Road, No. 11.

DISTRICT ROADS.

- No. 6. Road from Vizagapatam to Polapurtu.
 „ 15. ——— between Masulipatam and Ibrahimpatam.
 „ 19. Bridge over the Boogairoo.
 „ 26. First Class Road between Ghooty and Rayelcherroo.
 „ 24. Completing Road from Cuddapah to Tolapodatoor.
 „ 25. Bridging the Bellary and Humpsagur Road.
 „ 30. Bridge over the Coom at Dacumbode.
 „ 31. Road from Chingleput to Taiteray.
 „ 33. ——— from Trivatoor to the Palaur Annicut.
 „ 34. Bridge across the Palaur at the Annicut.
 „ 40. ——— over the Vellaur on the Southern Coast Road.
 „ 41. Road from Trichinopoly to Salem boundary.
 „ 42. ——— from Trichinopoly via Laulgoody and Woodiar-
 polliem to join Trunk Road, No. 9.
 „ 43. Bridge over the Vigay River.
 „ 44. Pulkanooth and Nelloctah Road.
 „ 46. Road from Palancottah to Tuticorin.
 „ 48. Bridge over the Ambravaty.
 „ 49. Bridging the Guersappah Ghat Road.

BUILDINGS.

- „ 11. Buildings for the Sappers and Miners at Dowlaiswa-
 rum.
 „ 27. New Hospital for the European Barracks at Bellary.
 „ 57. Altering and improving the Dragoon Barracks at
 Bangalore for the accommodation of a European
 Infantry Regiment.
 „ 56. Building two Blocks of married men's quarters in the
 above Barracks.
 „ 51. Improvements to the Custom House.
 „ 52. Civil Audit Office.
 „ 58. Secunderabad Barracks.

This project has already been sanctioned by the Government of India.

The Statement No. 2 exhibits the works sanctioned by the Government of India, the estimates of which amount to Rs. 88,76,807. Up to the end of the current official year Rupees 36,58,522 will have been expended. The amount required for the ensuing year is Rupees 37,07,214.

Putting the two Statements together, the total estimated cost “of works other than repairs, proposed to be under execution wholly or in part during the ensuing year under this Presidency, amounts to Rupees 1,48,90,489, of which sum Rupees 36,58,522 have already been expended and Rupees 64,00,791, it

is proposed to lay out in that year, leaving Rupees 48,31,176 for future years."

The amount proposed to be expended on repairs as exhibited in a third statement added under Nos. 1 and 2, is Rs. 18,51,470.

The following is an abstract of the expenditure sanctioned by Government for works described in the Statements submitted by Mr. Bourdillon :—

Districts.	Total Estimate sanctioned.	Amount already authorized to be expended.	Amount already expended.	Amount to be authorized for the year 1855-56.	Remaining amount available for completion.
1. Ganjam, ...	2,24,330	1,67,822	1,23,003	94,477	6,850
2. Vizagapatam, ...	1,01,492	78,309	54,500	46,992	0
3. Rajahmundry, ...	9,69,990	7,66,371	5,26,000	3,01,380	1,42,610
4. Masulipatam, ...	7,54,216	5,36,105	2,95,652	3,41,489	1,17,075
5. Guntoor, ...	3,80,948	2,84,937	1,56,932	2,06,255	17,761
6. Nellore, ...	3,09,193	1,70,713	75,175	2,29,018	5,000
7. Cuddapah, ...	1,54,901	1,29,549	75,460	79,441	0
8. Bellary, ...	3,94,421	2,68,649	1,69,130	1,80,911	44,380
9. Chingleput, ...	3,76,865	1,50,000	28,260	1,33,592	2,15,013
10. North Arcot, ...	9,00,828	5,69,889	3,58,889	3,33,639	2,08,300
11. South „, ...	3,89,310	2,07,835	1,26,559	2,05,076	57,675
12. Tanjore, ...	4,54,943	3,18,844	2,20,564	2,31,379	3,000
13. Trichinopoly, ...	1,23,991	1,12,987	63,152	60,839	0
14. Madura, ...	1,29,708	47,117	19,003	54,665	56,040
15. Tinnevely, ...	89,539	37,915	23,957	45,458	20,124
16. Coimbatore, ...	15,25,749	4,37,343	4,16,200	5,02,306	6,07,243
17. Salem, ...	98,308	15,989	6,249	92,059	0
18. Canara, ...	1,99,769	1,86,239	1,17,588	82,181	0
19. Malabar, ...	2,72,429	1,46,039	80,423	1,92,006	0
20. Madras, ...	1,07,450	94,570	70,406	37,044	0
21. Secundrabad, ...	4,88,343	4,77,923	1,70,000	18,343	0
22. Saugor, ...	3,782	0	0	3,782	0
23. Jaulnah, ...	9,245	6,163	3,512	5,733	0
24. Kurnool, ...	1,75,560	1,42,707	77,908	87,652	10,000
25. East Coast Canal, ...	2,26,593	1,00,000	1,00,000	1,26,593	0
26. Mysore, ...	14,904	0	9	14,904	0
	88,76,807	54,53,415	36,58,522	37,07,214	15,11,071

On the 11th July, Colonel Baker, Secretary to the Government of India, Department of Public Works eulogizes the Madras Budget of 1856-57 for the admirable manner in which it has been prepared. He proceeds to convey orders upon the several projects enumerated in Mr. Bourdillon's letter of the

19th March, and expresses opinions and remarks on the following works in Statement No. 1, Projects Nos. 17 and 2; in the one, "no designs have been submitted for the aqueducts across the several streams, nor have the streams themselves been marked in the sketch Map" and in the other, "an approximate estimate of the cost of the larger Bridges has not been given. Expresses doubts as to the sufficiency of the foundations of the Pennaur Bridge, No. 35, and of the masonry works, No. 23, proposed in Trunk Road, No. 11 in the probable event of sand being found in the river bed to a greater depth than that of the substructure." The Project No. 18, Kistnah Annicut Channel, he considers "not complete inasmuch as the Bridges and minor Channels of distribution remain unprovided for. The selection of a site for the Channel, in such near proximity to the river, has probably been guided by the circumstance that the river's margin is higher than the adjoining land; but if this river be given like most other rivers in alluvial soil, occasionally to erode its banks, its neighbourhood to the canal may prove to be a source of frequent apprehension and danger." Calls for information as to the supply of water in the Kistnah at different seasons to feed the existing Channels and those projected, as well as that relating to the cost of the Bridges noticed above. The additional information furnished with Project No. 1 is defective. "The sections run merely along the bank of the river and do not show the relative levels of these banks and of the adjacent country. No information is given of the site of the embankments, what area of floodway they enclose between them? What volume of water is discharged by the river in highest floods; or to what extent the embankments would limit the present spread of water?" Sanction to further outlay on this project is withheld until satisfactory and complete report on the points above indicated shall have been submitted. Further and more detailed information is also called for respecting the Project No 55. 1st. The Canal being affected by the tides it is not clear how its level can be steadily maintained unless there be a lock at each point where it enters and emerges from these Tidal Lagoons. The number and position of such locks should be distinctly shown. 2nd. There is no specification of the works, and the estimate is a general one. The Project No. 14 being a work of considerable importance, a Statement of the nature and extent of the expected traffic and of the probable returns is required, and with regard to Project No. 50, Colonel Baker observes "that neither the length of the Canal is stated, nor is there a scale to the map." Directs attention to his remarks on the propriety of levying tolls on all Canals of Navigation. Projects Nos. 29, 26, and 24 to remain in

abeyance. Expresses doubt as to the efficiency of "Sand and Potter's earth" for road metalling proposed in Projects Nos. 6, 15, and 19, as the roads being important, will be subjected to heavy traffic. On Project No. 43, remarks as to the deficiency of the depth of the wells of the Bridge on the Vigay River, and considers it doubtful whether the Verandah on the Sea front of the Custom House could be used as an Export ware-house as proposed in Project No. 37.

On the 12th August the Government of Madras recapitulates the works sanctioned, and directs the attention of the Chief Engineer to the several points commented upon by Colonel Baker. The works that have been sanctioned are as follow:—

IRRIGATION WORKS.

	Rupees.
No. 18. Kistnah Annicut Channel from Vullabapoorum to tide water,	1,39,700
„ 47. Calingaroyen Channel in Coimbatore, ...	64,898
„ 54. Canal between Madras and Ammuncovil, ...	72,800
„ 10. Increasing the width of the Palcole Canal, and building a lock,	57,280
„ 50. Canal from the Tuddy River to Coompta, ...	36,021

TRUNK ROADS.

„ 28. Works at Puningardce back water on the Northern Trunk Road,	33,023
„ 20. Masonry works between Covoor and Moodigunda,	84,580
„ 21. Ditto, in completion of No. 7 Trunk Road,	89,434
„ 36. Bridge over the Vellaur on Trunk Road, No. 8,	37,263
„ 39. Metalling between Oolundoorpett and Samiaveram,	37,313
„ 37. Bridge on Trunk Road, No. 9 over the Pennar,	46,901
„ 39. Ditto ditto, Guddilum,	25,869

DISTRICT ROADS.

„ 6. Road from Vizagapatam to Polapurty, ...	45,750
„ 15. Ditto Masulipatam to Ibrahimpatam, ...	43,250
„ 19. Bridge over the Boogairoo,	38,558
„ 25. Bridging the Bellary and Humpsagur Road, ...	59,250
„ 30. Bridge over the Coom at Dacumbode, ...	26,860
„ 31. Road from Chingleput to Taitoray, ...	41,130

Carried forward, 9,79,880

	Brought forward, ..	9,79,880
No. 33.	Road from Trivatoor to the Palaur Annicut,	38,600
„ 34.	Bridge across the Palaur at the Annicut, ..	94,400
„ 40.	———— over the Vellaur, on the Southern Coast Road,	35,020
„ 41.	Road from Trichinopoly to Salem boundary, ..	50,000
„ 42.	Ditto Ditto, via Ialgoody to join Trunk Road, No. 9,	43,600
„ 43.	Bridge over the Vigay River,	42,200
„ 44.	Pulkanooth and Nellacottah Road,	25,560
„ 46.	Road from Palamecotta to Tuticorin,	67,361
„ 48.	Bridge over the Ambravutty,	63,830
„ 49.	Bridging Guersapah Ghaut Road,	25,994

BUILDINGS.

„ 11.	Buildings for the Sappers and Miners at Dowlaishweram,	47,028
„ 27.	Hospital for European Troops at Bellary,	82,330
„ 67.	Dragoon Barracks at Bangalore,	1,55,600
„ 51.	Additions and alterations to the Custom House at Madras, and improving the external accommodation,	70,010
„ 52.	Rebuilding the Civil Audit office,	37,350

Total Rupees, ... 18,58,793

REPORT ON VACCINATION, MADRAS PRESIDENCY.

Madras Records, No. XLII.

ON the 9th June, 1857, Dr. A. Lorimer, Secretary Medical Board, submits returns of Vaccination throughout the Madras Presidency for 1856. The number of operations performed in 1856 amount to 4,02,440, while in the preceding year 4,39,651 Vaccinations were recorded, showing a decrease of 37,211. This deficiency in 1856 is discouraging, but the Medical Board believe, that the present returns have been more correctly prepared than those of the previous year, and thereby more real good has been accomplished. Other causes are also stated to which the Board ascribe the decrease in the number of Vaccinations, but the chief obstructions to the spread of the prophylactic are the prejudices and apathy of the Hindoo community, and the want of cordiality generally on the part of the Native of-

ficials in the districts. As a remedial measure the Board recommend that the Collectors and other Civil officers be reminded of the orders of Government to give that full support and co-operation to the Circuit Vaccinators, which is necessary to the promotion of Vaccination, but which has been so partially accorded.

The Government on the 14th July, record their remarks and orders on the report, and the causes which have affected the progress of Vaccination in the Madras Presidency, and express a hope that all the Civil authorities will afford the fullest support to those specially employed in this work.

REPORT ON THE ADMINISTRATION OF THE SALT DEPARTMENT.

For 1855-56.

MR. T. E. Trevor, Officiating Secretary to the Board of Revenue on the 7th February, 1857, submits statements containing the results of the Administration of the Salt Department for 1855-56.

The quantity of Salt in store on the 1st October, 1855, as compared with the same date in the previous year, was

	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>
In 1854,	11,26,664	14	15
In 1855,	20,59,864	12	4

The quantity imported and sold during the two years was as follows :—

IMPORTED.

	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>
In 1854-55,	73,63,823	30	12
In 1855-56,	74,09,058	2	12

SOLD.

	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>
In 1854-55,	59,12,566	32	5½
In 1855-56,	66,87,079	17	13¾

The following statement shows the Taidad and the actual outturn of each Agency during the past season :—

	<i>Taidad.</i>	<i>Outturn.</i>	<i>Deficiency.</i>
Hidgelee, .. Mds.	11,00,000	8,44,185	2,55,815
Tumlook,	9,00,000	6,51,834-18	2,48,166
Chittagong,	8,00,000	4,55,887	3,44,113
24-Pergunnahs, ..	6,00,000	2,33,068	3,66,932
Carried forward, ...	34,00,000	21,84,974-18	12,15,026

Broughtforward, Mds.	34,00,000	21,84,974-18	12,15,026
Balasore,	7,00,000	6,51,100	48,900
Cuttack,	4,50,000	3,01,316	1,48,684
Pooree,	3,00,000	6,71,368	28,632
„ Kurkutch, ..	4,00,000		
Total, ..	52,50,000	38,08,758-18	14,41,242

The deficiency above shown in the outturn in all the Agencies, the Board ascribe partly to the very unfavorable weather during the season of manufacture, and partly to the great difficulty in obtaining coolies and to some other causes.

The experiment for manufacturing Salt under the excise system has proved unsuccessful, and the Board attribute the failure to the contractors not being men of capital.

In the sales of Salt there has been an increase of 62,206 maunds in the undermentioned Divisions :—

<i>Maunds.</i>			
Chittagong, .. ..	..	..	17,108
Bullooah, .. ..	..	..	2,567
Backergunge, .. ..	..	..	3,686
Jessore, .. ..	..	..	6,139
Baugundy, .. ..	..	..	2,512
Barripore, .. ..	..	..	9,163
Calcutta, ... ..	..	..	1,257
Western, ... ..	..	..	6,680
Midnapore, .. ..	..	..	1,735
Jellasure, ... ..	..	..	11,359

Total, 62,206

There has also been an increase in the sales in Tumlook and in the three Agencies composing the Cuttack Divisions, aggregating 66,136 maunds 14 seers and $2\frac{3}{4}$ chittacks.

The confiscations during the year as compared with the past year were as under :—

	<i>Attached.</i>			<i>Released.</i>			<i>Confiscated.</i>		
	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>	<i>Mds.</i>	<i>Srs.</i>	<i>Cks.</i>
In 1854-55,	17,898	37	10 $\frac{1}{2}$	15,101	26	4	3,985	0	6 $\frac{1}{2}$
In 1855-56,	15,423	20	15	12,809	19	3 $\frac{1}{2}$	30,023	20	15 $\frac{1}{2}$

The convictions during the year under report were more numerous than the preceding year; and in Cuttack, the cases of smuggling have been fewer during the past year.

The Board subjoin the following remarks of the Controller upon the operation of the indulgent ruling of Section 27, Act XXIX :—

“The landholders generally have received the indulgence with a spirit of thankfulness which so rich a boon was well calculated to give rise to, and have by their co-operation to put

down illicit manufacture, prevented as far as I can ascertain any sacrifice to the Revenue. In addition to the Reports received from Barripore, Baugundy, Bulloah, and Western Superintendents to the effect that the Zemindars in their Divisions have strenuously endeavoured to check illicit manufacture on their respective Estates, I received during my tour credible information that Zemindars were doing all in their power to co-operate with our Preventive Establishment, and frequently took the initiative themselves in discountenancing illicit manufacture, and showing their displeasure on every occasion when it had been brought to their notice that any attempt to infringe the law had been resorted to.

"During the past year, only two cases have been instituted by the Superintendent of Jellasore Salt Chokeys, and they are still pending in the Midnapore Judge's file. In these cases, the Sudder Izardars were previously warned on several occasions, but to no effect. It was therefore, deemed necessary for the sake of example to prosecute them in the Civil Court."

The Board express satisfaction at the above results, which show that the Zemindars appreciate the advantages of the indulgent reading of the Law.

The Board proceed to show the prospects of the current year. The Taidad for the current year is 52½ lacs of maunds. From this is to be excluded the Salt manufactured in Cuttack, 4,50,000 maunds, as that will not come into the market until after the close of the year, which reduces the Taidad to 34 lacs of maunds. The Board observe, that the quantity produced in the Bengal Agencies will equal that of the last season *viz.* 22 lacs of maunds. They sum up the provision for the year thus in round numbers :—

	<i>Maunds.</i>
Salt in store on 1st October,	27,90,000
Imported during first Quarter,	12,95,000
Cuttack Salt now being imported,	10,00,000
Expected outturn exclusive of Cuttack,	22,00,000
—————Imports,	22,50,000

Maunds, .. 95,35,000

The Board assume the total consumption to be what it is stated to have been in 1854-55 in Mr. Plowden's Salt Report *viz.* 62 lacs of maunds, and there will still remain about 30 lacs of maunds in excess of the expenditure.

The importation of Madras Salt has been stopped.

MADRAS LAND REVENUE REPORT.

For Fusly ^{1264.}
1854-55.

ON 19th February, 1857 the Government of Madras record their belief that the measures adopted by Government for affording relief, and the prosecution of works of irrigation, have brought the country through a period of much difficulty. The Government notice certain remissions, and express their desire that all such should speedily be discontinued, both to secure the revenue and the ryot's independence. They notice that the supply of sugar-cane was less by 3,500 cawnies than in the preceding year. The decrease is attributed to a scarcity which caused the people to abandon luxuries for necessaries. "The total demand for Fusly, 1264 was Rupees 4,63,60,842, of which 4,18,10,343, or more than 90 per cent. was collected within the Fusly; and at the end of January, 1856, Rupees 5,28,595 only remained." No great difficulty is apprehended in the way of realizing the balances. Government remark that the Tuccavee system will cease in Fusly, 1267, but the advances in this Fusly amount to Rs. 3,50,075. The salt revenue shewed an increase over last year of Rs. 3,61,594, and the net increase from all sources is Rs. 16,22,096. The Government trust the remissions to "privileged classes," if not in the nature of enams will shortly cease. Enquiry is to be made into outstanding balances, and the irrecoverable balances amounting to Rs. 45,399 are to be struck off finally, the money being owed by persons too poor to meet the demand.

"Before proceeding to describe the season under review, it is desirable to recall a few of the facts connected with that which preceded it. The season of Fusly, 1263 (A. D. 1853-54) was one of difficulty and depression, throughout the districts in the centre and on the eastern side of the Peninsula. Both the S. W. and the N. E. monsoons were seriously deficient, and the Board were obliged to give a painful picture of the state of several of the Provinces." The Land Revenue therefore fell off by Rs. 28,70,408, while the expenditure on public works undertaken to give the people food reached Rs. 17,00,000. The following table shews the revenue of the preceding ten years:—

<i>Fuslies.</i>	<i>Land Revenue.</i>	<i>Extra Sources.</i>	<i>Total.</i>
	Rs.	Rs.	Rs.
1254,	3,41,27,687	1,13,80,199	4,55,97,886
1255,	3,41,73,415	1,10,83,929	4,52,57,344
1256,	3,60,84,900	1,07,24,072	4,68,08,972
1257,	3,68,32,279	1,08,33,624	4,76,65,903

1258,	3,60,51,323	1,04,97,983	4,65,49,306
1259,	3,49,27,725	1,07,44,083	4,56,71,808
1260,	3,59,14,223	1,09,38,096	4,68,52,319
1261,	3,66,31,010	1,10,79,987	4,77,10,997
1262,	3,70,39,729	1,08,59,573	4,78,99,302
1263,	3,41,69,321	1,02,60,953	4,44,30,274

The season under review was not good, and in Bellary and Mysore there was great distress. For a time 1,00,000 persons were employed on the Public Works in Kurnool and Bellary, and in many districts the rains were deficient. The season was one well calculated to display the effects of works of irrigation. It was on the whole healthy. Its most remarkable feature was the rise in prices which amounted to 70 per cent. over the average of the preceding ten years. To meet this terrible pressure on the poorer classes Rs. 5,34,688 was expended on roads, and Rs. 9,49,160 more expended on the Railway, with Rs. 66,01,093 on Public Works greatly alleviated the distress. All duties on the import of grain were abolished, and in many places the price obtained for the crops compensated for the shortness of the harvest. The districts irrigated have most largely benefited. The revenue for the year was

	Rupees .
Land Revenue,	3,57,01,998
Extra Revenue,	1,03,37,118
Total,	4,60,39,116

The revenue therefore has recovered in spite of a season by no means favourable to the extent of Rs. 15,32,677. Five districts have slightly declined, a result produced entirely by reductions in the assessment. The total reductions amount to Rs. 11,37,491. The Board believe that the result will confirm the opinions of those most confident in the wisdom of diminishing the assessment in order to increase the area of cultivation. The Board proceed to explain the tables and add a list of persons in the Tanjore district who though ryots are wealthy. Thus 133 persons hold estates paying from Rs. 1200 to Rs. 9000, and seven landholders are named who pay from Rs. 10,475 to Rs. 25,000 a year. The advance in cultivation has been

Year.	...	...	Cawnies.
Fusly 1263,	...	..	85,42,623
„ 1264,	...	..	87,49,152

2,06,529

"The amount of assessment on irrigated land, however, gives a lower total than in Fusly, 1263 owing chiefly to the reduction in the district of South Arcot and to the lower commutation rate in Tanjore." The following statement shews the amount cultivated with cane, cotton and indigo :—

<i>Products.</i>					<i>Fusly, 1264.</i>
					<i>Cawnies.</i>
Sugarcane,	...	..	...	...	27,457
Cotton,	...	..	...	...	6,56,584
Indigo,	...	..	...	...	1,22,309

There has been a decrease on all, chiefly on account of the scarcity which induced the ryots to cultivate necessities exclusively.* The indigo however has increased in North Arcot and Cuddapah. The Board referring to outstanding balances say that the ryots appear determined to try the existing law to the utmost, and that nothing short of a radical change will secure the punctual payment of revenue. Property to the extent of Rs. 7,071 was sold for arrears, but this statement shews much less than the truth, land having been sold subsequent to the close of the Fusly. The Board proceed to notice certain remissions, and express a hope that the system of Tuccavee or advances will soon be abolished. The charges of the year amount to Rs. 67,52,292 or Rs. 2,41,133 below those of the Fusly, 1263, but differences have been introduced in the mode of making up the accounts. The revenue from Salt has increased by Rs. 3,61,594, and from sea customs by Rs. 20,729. The following table shews all the items of Extra Revenue :—

<i>Items.</i>	<i>Fusly, 1263.</i>	<i>Fusly, 1264.</i>
	<i>Rupees.</i>	<i>Rupees.</i>
Salt,	46,67,316	50,28,910
Frontier Chowkies,	2,47,360	1,61,802
Moturpha,	11,69,466	11,15,543
Sea Customs,	10,09,818	10,30,547
Tobacco,	1,840	0
Stamps,	5,76,449	5,57,338
Abkarry,	22,61,528	21,44,230
Sundry small Farms and Licenses,	3,27,176	2,95,747

Total, ... 1,02,60,953 1,03,37,117

The Board explain the changes, and notice that the tobacco revenue which on an average from 1255 to 1261 produced Rs.

* There has been some blunder in binding this book, owing to the practice of paging each Chapter separately.

8,47,261 now produces nothing, the monopoly having been abolished.

On 17th March, 1856, the Commissioner for the Northern Circars reports that the Circars contain 16,060 villages and hamlets of which 4717 are Government villages and 5515 proprietary villages, and 572 villages are rent free. The Government villages are thus classified :—

	<i>Villages.</i>
Ryotwar,	1,425
Joint Rents,	1,530
Cosht do.,	620
Rents for 1 year,.. .. .	217
Do. for longer periods,	231

4,023

Cosht rent is a form of joint rent. It is proposed to change the joint rent system into Ryotwar.

Gaujam and Vizagapatam are irrigated districts, and in Masulipatam, 46 per cent. of the revenue is derived from watered Land. In Rajahmundry 38 per cent. is derived from similar sources, and in Guntoor, about 17 per cent. From the reports of the Collectors it appears that the great advantage of irrigation is the certainty it produces. Disease last year caused a falling off among the cattle to the extent of

Cows, 18,045

She Buffaloes, 17,031

Sheep and goats, .. 80,292 but the Commis-

sioner places no confidence in the returns.

The Commissioner explains certain tables, and observes that the rains were plentiful, the average fall being 39 inches during the South West Monsoon and 5½ during the North East Monsoon. In some of the districts there was an overplus of moisture very injurious to the crops. The Circars were more exempt from epidemic disease than during the previous year, but the mortality from fever was unusually large. The Commissioner explains some changes in the amount of receipts of little importance, and gives the following table of taxation :—

Fusly, 1264.

<i>Items.</i>	<i>Land.</i>	<i>Sist.</i>	<i>Average</i>		
	<i>Acres.</i>	<i>Rs.</i>	<i>per Acre.</i>		
			<i>Rs.</i>	<i>As.</i>	<i>P.</i>
Lands not irrigated, ..	14,91,631	26,03,814	1	11	6
Depending on the Goda- very Annicut Channels,	89,553	3,12,992	3	8	0
Carried forward,	89,553	3,12,992	3	8	0

Irrigated Lands.	{	Brought forward,	89,553	3,12,992	3	8	0
		Depending on Tanks,	2,04,095	7,38,364	3	10	0
		Ditto on Channels,	1,01,125	3,81,324	3	12	4
		Ditto on Wells, ..	12,417	78,936	6	5	9
		Ditto on Rain, ...	40,820	92,681	2	4	0
Total,			4,18,010	16,01,297	3	9	3
Grand Total,			19,39,644	42,08,111	2	2	9

He explains the remissions which are small except in Guntoor where the season has been one of unusual disaster. The whole amount of remissions is Rs. 4,09,868, and the total of the Land Revenue is 66,75,464 being 8,754 above that of the preceding year.

Ryotwar, Coslit, and joint rents,	... Rs.	42,68,212
Rents for more than a year,	..	1,29,136
Zemindaree and Proprietary estates, ..		22,78,116
		<u>66,75,464</u>

The value of land in occupation but not cultivated amounts to Rs. 3,92,487 of this sum.

The Extra sources produced Rs. 21,94,158 or Rs. 1,58,459 more than last year. The increase has taken place chiefly in Salt. The Sevoy Jummah or extra land revenue amounted to Rs. 95,280 chiefly from interest on outstanding balances. The Commissioner explains the balances, and proceeds to state that the total collections during the year amounted to Rs. 88,87,280, being Rs. 1,96,125 in excess of last year. The revenue was collected without recourse to coercion except in 13 instances. The charges amounted to Rs. 10,96,579 or 12.34 per cent. on the amount realized. "The charges on account of irrigation, exclusive of those incurred for the Godavery and Kistnah Annicuts, amount to Rs. 1,13,758 on a revenue of Rupees 16,04,297 from irrigated lands, the expenditure being Rupees 7.9 per cent. on the revenue." Enams lapsed during the year to the amount of Rupees 22,537 a year. Thirteen thousand and eighteen English letters had to be disposed of in the Collectorates in the course of the year, together with 1,14,109 vernacular letters, and 97,868 more issued to Tehsildars. The correspondence shews a tendency to increase.

The statements appended to the Board's Report may be thus condensed :—

Villages in Madras,...	...	...	95,963
Of these ryotwar, ..	...	...	30,896
Tanks, ... ..	...	...	38,792
Anicuts, ... ..	...	...	3,320

Ploughs,	10,39,090
Cattle for agriculture,	26,48,428
Cows,	26,01,960
She buffaloes,	10,62,309
Sheep and goats,	50,46,351
Population,	2,23,01,697
Ryots,	12,47,056
Individual leases,	14,76,320
Joint,	1,64,572
Puttalis above Rupees 1000,	408
— above Rs. 500 but less than 750, ...	1,027
— between Rs. 50 and Rs. 100, ..	78,133
— — — — — 10 and Rs. 50, ..	4,95,397
Extent of cane cultivation, cawnies, ..	20,269
Cotton,	5,69,050
Indigo,	1,18,514
Total Revenue from land,	Rs. 3,57,01,998
Extra sources, ..	1,03,37,117
Salt,	50,28,910
Sayer,	1,64,802
Abkarree,	21,44,232
Small farms,	3,27,176
Moturpha,	11,15,543
Customs,	10,30,547
Stamps,	5,76,449

The Appendix contains the separate report from each Collector with the figures, of which those given in the Report are the digest.

Vizagapatam.—The Collector explains his returns and notices the mode in which a tax is levied on clearings in the mountain jungle. The tax consists of eight annas on every knife employed.

Bellary.—The Collector furnishes tables minutely detailing the incidence of the Moturpha or trade tax.

1687	Corn merchants pay, ..	Rs. 7-10	each .
526	Cloth ditto,	18-6	„
365	General and cloth,	26-13	„
4447	—,	9-12	„
93	Shroffs,	12-11	„
61	Confectioners,	7-15	„
183	Cotton dealers,	26-1	„
125	Betel and cocoanut,	12-13	„
75	Sugar and jaggery,	18-10	„
478	Betel and tobacco,	5-14	„
327.	Oil dealers,	11-15	„
1123	Other dealers,	6-6	„

Carpenters pay Rs. 2-6, iron-founders Rs. 21-7, dyers Rs. 6-11, butchers Rs. 13-12 each. Each cloth loom pays Rs. 4-3, each carpet loom Rs. 3-8 a year.

EAST INDIA RAILWAYS.

Blue Book, dated 22nd July, 1857.

“THREE thousand six hundred and twenty-eight (3628) miles of railway have been sanctioned; and are in course of construction, viz. :—

By the East Indian Railway Company, from Calcutta to Delhi, with branches from Burdwan to Rancegunge, and from Mirzapore to Jubbulpore, 1,400 miles.

By the Madras Company, from Madras to the Western Coast at Beypore, 430 miles ; and

From Madras, *via* Cuddapah and Bellary, to meet a line from Bombay at or near the river Kristna, 310 miles.

By the Great Indian Peninsula Company, from Bombay to Callian, 33 miles, with extensions.

North East to Jubbulpore, to meet the line from Mirzapore, with a branch to Oomrawuttee and Nagpore, 818 miles ; and

South East *via* Poonah and Sholapore, to the Kristna River, to meet the line from Madras, 357 miles.

By the Sind Company, from Kurrachee to a point on the Indus, at or near to Kotree, 120 miles ; and

By the Bombay, Baroda, and Central India Company, from Surat to Baroda and Ahmedabad, 160 miles ”

These lines it is estimated will cost £30,231,000, of this sum £20,314,300 has been issued viz. £833,300 at 4½ per cent. 1,000,000 at 4¾ per cent. and 1,841,810,000 at five per cent. of these sums.

East Indian Railway,	...	..	£8,731,000
Madras,	...	...	4,000,000
G. I. Peninsula,	...	...	6,333,300
Sind,	...	...	500,000
Bombay, Baroda and C. I. C.	...	...	750,000

20,314,300

The land required for the Railway and the termini has also been given Three hundred miles only are open, viz.

			Miles.
Calcutta to Rancegunge,	..	..	121
Bombay to Campoolie,	...	...	87
Madras to Arcot,	...	...	65

The works for the trunk lines, in accordance with Mr. Simms and Lord Dalhousie's advice, are most substantial. The gauge fixed on for all India is 5 feet 6 inches. The Bengal line has cost about £12,000 a mile, and the Madras line £5,500. In Bombay the accounts are as yet too imperfect for the mileage to be ascertained. "The line in Bengal, now open, is 10 miles longer than the London and Birmingham Railway. The latter occupied six years, the former five years in constructing. In Madras, the execution of the works has been more rapid still, 65 miles having been opened for traffic within three years after commencement, and in Bombay, also, 33 miles were completed and opened in less than four years."

In Bengal 8,95,121 passengers, and 77,685 tons of goods were carried during 1856. The receipts were £95,188-16-4. Of the passengers 8,35,201 passengers were third class. The Great Indian P. Railway was open for an average length of 59 miles, and earned £37,312-12 in six months. Of this sum £28,549 was profit.

In Madras the Railway in six months carried 71,456 passengers, and 6,14,401 maunds of goods, and earned £11,720. Minute statistics of expenses on the East Indian and Madras Railways are added, and a Railway map of India.

REPORT ON THE ABKAREE, L. P.

For 1855-56.

On the 27th January, 1857, the Officiating Junior Secretary to the Board of Revenue submits the annual Report:—

	Rs.
The total collections amounted to, ...	36,18,692
„ Balances,	88,817
„ Charges,	6,12,409
„ Net revenue,	30,06,283
Shewing increase over 1854-55, of ...	2,37,291

The number of persons arrested was 1,276

————— imprisoned is only returned from some districts.

The estimated revenue for 1856-57 is Rs. 26,91,791.

The Board review each division, and refer to an attempt of the Police to interfere with the shops in Calcutta. In 1854-55 those shops numbered 152, yielding Rs. 2,11,825 a year.

REPORT ON CIVIL JUSTICE IN MADRAS.

For 1856.

THERE is no report, the record consisting of tables only. The most important statistics are as following :—

Suits instituted,	1,21,564
Value of property,	Rs. 1,11,49,999
Suits decreed,	47,043
For Plaintiffs,	40,747
Appeals decreed,	3,790
For Appellant,	1,674
Average duration of suits,	1 yr. 0 m. 16 days.
Highest—(in Honore),	2 yr. 6 m. 11 days.
Lowest—(in Guntoor),	0 1 m. 19 days.
Average duration of appealed suits,	2 yr. 8 m. 15 days.
Suits for Land rent and revenue,	4,566
„ Fixed property,	1,111
„ Debts, wages, &c.,	41,366

The same details are added as to each class of Judge, together with tables shewing the work performed by every individual Judge.

EXTERNAL COMMERCE OF BENGAL.

For 1856-57.

THE total value of the “External Commerce of Bengal (Chittagong, Balasore, and the Provinces of Arracan and Tenasserim included) has amounted, in the year 1856-57, to Rupees 31,17,63,348, being an increase over 1855-56 of Rupees 2,41,99,786, or Rupees 6,95,88,028 above the average value of the commerce of the three preceding years.”

The total value of the Imports was Rs. 15,43,22,170, and of Exports Rs. 15,74,41,178. The Import of articles of merchandise has declined principally in cotton twist, and yarn, cotton piece goods, silk goods and glass ware. Manufactured metals have increased. The Exports on the other hand have increased by Rs. 24,13,839 chiefly in saltpetre, hides, opium, sugar and grain. Sugar has increased by Rs. 48,86,049, and grain by Rs. 60,85,071. Indigo, jute, and lac, have declined.

The comparative movement of trade in 1855-56, and 1856-57 is thus shown :—

Statement showing the Aggregate Value of the Principal Articles of Import into Calcutta by Sea in 1856-57, compared with similar Imports in 1855-56.

	1855-56.	1856-57.
Apparel,	Rs. 19,80,651	22,25,173
Beads,	3,95,187	3,61,831
Books and Stationery,	10,52,925	12,24,203
Cabinet-ware,	7,70,933	8,60,655
Chanks,	39,430	84,116
Cigars,	2,39,793	2,26,647
Coals,	5,86,717	3,96,860
Coffee,	1,14,157	71,614
Cotton Twist and Yarn,	90,02,951	81,22,578
— Piece Goods,	3,21,10,633	3,17,15,287
Drugs,	3,24,818	2,88,218
Dyes,	2,05,043	3,99,202
Fruits and Nuts,	8,21,699	11,40,169
Glass-ware,	10,73,457	7,78,963
Gums,	50,737	65,536
Hides,	2,91,138	5,85,906
Ice,	2,37,126	1,22,065
Instruments, Musical,	1,46,849	1,67,152
Jewellery,	6,09,930	7,13,295
Machinery,	39,28,928	19,07,381
Malt Liquors,	7,57,011	7,33,499
Manufactured Metals,	67,73,770	76,12,339
Medicine,	1,17,075	2,22,221
METALS. {	Copper,	24,21,581
	Iron,	12,19,584
	Lead,	1,33,621
	Quicksilver,	69,284
	Spelter,	4,09,871
	Steel,	1,12,158
METALS. {	Tin,	4,07,846
	Yellow Metal,	1,04,750
Military Stores,	7,888	21,060
Naval Stores,	4,65,385	4,93,408
Oilman's Stores,	3,11,059	3,12,687
Paints and Colors,	3,07,158	3,60,968
Perfumery,	2,11,574	2,12,648
Porcelain and Earthen-ware,	1,39,911	1,80,265
Provisions,	3,96,663	4,78,382
Salt,	35,94,722	38,45,371
Silk Goods,	8,95,183	5,57,686
Spices,	7,94,778	11,54,390
Spirits,	8,03,021	8,94,276
Carried forward,	7,44,36,995	7,42,12,167

Brought forward ...	7,44,36,995	7,42,12,167
Timber and Planks,	9,69,980	3,17,165
Umbrellas,	3,33,865	4,49,896
Wines,	10,66,673	10,08,737
Woollens,	7,67,280	6,88,156
Sundries,	20,96,101	22,63,606
Merchandise,	7,96,70,694	7,89,39,727
Treasure,	5,97,67,578	6,58,46,272
Total, Rupees, ...	13,94,38,272	14,47,85,999

Statement showing the Aggregate Value of the Principal Articles of Export from Calcutta by Sea in 1856-57, compared with similar Exports in 1855-56.

	1855-56.	1856-57.
Apparel,	Rs. 37,775	Rs. 20,757
Books,	20,398	3,348
Cotton Goods,	4,89,789	6,95,730
„ Wool,	15,81,152	21,02,295
Cowries,	22,068	16,182
Drugs,	3,83,967	5,38,342
Dyes { Indigo,	1,97,84,900	1,47,66,431
{ Other sorts,	3,09,247	3,46,955
Grain,	1,16,97,691	1,77,82,762
Gunnies and Bags,	42,13,890	41,20,881
Hides,	37,15,824	49,77,136
Horns,	1,05,612	1,13,009
Jute,	32,65,748	27,49,754
Lac,	12,81,236	10,50,397
Naval Stores,	2,20,836	3,21,043
Oils,	4,72,029	5,55,234
Opium { Pehar,	2,42,90,727	2,68,62,207
{ Benarcs,	1,20,98,691	1,13,25,832
Provisions,	1,41,293	2,38,890
Saltpetre,	42,35,333	54,10,742
Seeds,	82,52,441	58,01,124
Shawls, Cashmere,	5,64,792	3,44,678
Silk Piece Goods,	38,45,179	26,51,159
„ Raw and Cocoons,	70,40,137	69,95,168
Spirits, Rum,	2,04,827	1,61,722
Sugar,	1,13,38,544	1,62,24,593
Tallow,	1,24,706	1,74,466
Tobacco,	1,20,644	2,12,419
Wax and Wax Candles,	96,497	3,63,680
Carried forward, ...	11,99,75,973	12,69,26,936

Brought forward, ...	11,99,75,973	12,69,26,936
Sundries, ...	12,04,156	17,16,262
Total, ...	12,11,80,129	12,86,43,198
Imports Re-exported, ...	21,12,131	48,72,030
Total, ...	12,32,92,260	13,35,15,228
Treasure, ...	23,40,243	62,15,295
Total, Rupees, ...	12,56,32,503	13,97,30,523

*Principal Articles of Import and Export to and from Chittagong
in 1856-57 compared with similar Imports and Exports in
1855-56.*

IMPORTS.					1855-56.	1856-57.
Botelnuts, ..	..	..	..	..	Rs. 1,274	Rs. 2,715
Cocoanuts, ...	..	..	..	..	10,473	11,884
.. Shell, ..	..	..	..	..	1,322	178
.. Oil, ...	..	..	..	..	648	1,575
Cowries, ..	..	..	..	..	.....	8,225
Coir and Coir Rope, ..	..	..	..	..	7,738	10,815
Dammer, ...	..	..	..	..	1,643	3,149
Timber, ...	..	..	..	..	.....	3,375
Sundries, ...	..	..	..	..	8,892	10,653
Total, ...	..	..	..	..	31,990	52,569
Treasure, ...	..	..	..	..	6,000	4,000
Total, Rupees, ...	..	..	..	..	37,990	56,569
EXPORTS.					1855-56.	1856-57.
Grain, ...	..	..	..	..	Rs. 3,38,924	Rs. 4,55,738
Sugar, ..	..	..	..	..	4,035	2,665
Sugarcandy, ...	..	..	..	..	928	.....
Piece Goods, ...	..	..	..	..	15,375	7,188
Tobacco, ...	..	..	..	..	13,002	5,964
Twist and yarn, ...	..	..	..	..	2,307	1,066
Timber and Planks,	9,318	737
Sundries,	13,092	8,156
Total Rupees,	3,96,981	4,81,514

IMPORTS.	1855-56.	1856-57.
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*Principal Articles of Import and Export to and from Arracan
in 1856-57 compared with similar Imports and Exports
in 1855-56.*

IMPORTS.					1855-56.	1856-57.
Apparel,	...	..	...		Rs. 4,320	Rs. 415
Ale—Beer,	...	..	..		6,648	7,448
Brandy and Gin,	...	...	...	...	4,240	2,790
Cotton Piece Goods,	...	...	...	...	30,126	7,537
China-ware,	...	...	...	...	9,916	...
Metal—Iron,	..	...	...	...	.....	5,980
Rattans,	...	...	..	...	7,548	...
Timbers,	...	..	...	...	13,543	9,526
Wines,	..	...	...	..	6,221	4,046
Sundries,	...	...	...	...	85,723	67,246
Treasure,	...	..	...	..	1,60,136	3 21,554
Total, Rupees,.....					3,28,421	4,26,542
EXPORTS.					1855-56.	1856-57.
Cutch,	...	..	...	...	1,820	.....
Gunnies,	...	...	...	...	20,500	.....
Carried forward. ...					22,320	.....

		Brought forward,	...	22,320	.....
Grain,	...	...	Rs.	1,06,76,444	Rs. 29,85 078
Jute,	...	...	...	...	1,000
Hides,	...	...	...	2,898	...
Rattans,	...	...	...	3,976	728
Pepper,	..	...	...	...	5 678
Tobacco,	...	...	...	20,255	56,544
Sundries,	...	..	...	3,319	4,201
Treasure,	...	..	...	...	2,66,369
Total, Rupees,...				1,07,29,212	33,19,598

Principal Articles of Import and Export to and from the Tenasserim Provinces in 1856-57 compared with similar Imports and Exports in 1855-56.

IMPORTS.				1855-56.	1856-57.
Arms and Ammunition, ..	...	...	Rs.	5,821	Rs. 28,791
Cutch, ...	..	...	...	22,238	16,176
Earthen Ware, ...	...	..	...	28,679	...
Grain, ...	..	...	...	60,812	1,08,636
Malt Liquors, ...	...	..	...	95 179	24,051
Metal,—Iron, ..	..	...	...	8,780	24,052
Piece Goods,—Cotton, ...	...	...	...	6,55,944	7,99,065
Tobacco, ...	...	..	...	86,186	31,427
Twist and Yarn, ..	..	...	...	1,73,198	1,60,649
Wines, ...	...	...	...	20,226	8,005
Sundries, ...	...	...	...	8,32,912	12,58,050
Treasure, ...	...	...	...	1,58,543	4,24,122
Total, Rupees, ..				21,48,518	28,83,024

EXPORTS.				1855-56.	1856-57.
Betelnuts, ...	...	..	Rs.	...	Rs. 82,504
Cutch, ...	..	...	...	41,028	5,744
Grain, ..	..	...	...	6,12,652	9,27,692
Fishmaw, ...	...	..	...	551	3,041
Hides, ...	...	..	...	3,088	...
Horns, ...	...	...	...	566	189
Piece Goods—Cotton, ..	..	...	...	26 275	5,04,598
Stick Lac, ..	...	...	...	2,568	15,616
Twist and Yarn, ...	...	..	...	...	2,12,607
Timber, ...	...	...	...	10,66,462	20,68 966
Sundries, ..	...	...	...	65,684	6,53,772
Treasure, ...	...	..	...	2,13,370	1,47,910
Total, Rupees, ...				20,32,244	46,17,639

The largest trade is with Great Britain amounting to

Imports—merchandise,	Rs. 6,46,34,569
Treasure,	3,87,10,796

Total,	10,33,45,365
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Exports—merchandise,	4,47,30,708
.. ..	300

4,47,36,008

Total,	Rs. 14,80,81,373
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France sends Rs. 17,67,308 of merchandize and Rs. 70,41,270 of treasure, and takes Rs. 88,67,714 of merchandise but no treasure. China sends Rs. 16,48,933 of merchandise and Rs. 75,17,485 of treasure, and takes Rs. 3,69,42,598 of merchandisc, of which Rs. 3,27,67,507 consists of opium, and Rs. 20,58,726 of treasure.

The tonnage of Calcutta during the year was 1,014 vessels inwards with an aggregate of 5,72,127 tons, and outwards 1,113 vessels of 6,66,416 tons. More than a clear half each way carried British colours.

The Imports of specie into Calcutta were as follows :—

SPECIE AND BULLION.

IMPORTS.		1856-57.
United Kingdom,	Rs. 3,87,10,796	
Aden,	51,300	
America, North,	48,375	
Arabian Gulf,	66,725	
Bourbon,	8,92,989	
Cape of Good Hope, .. ..	.....
Ceylon,	1,58,150	
China. { Hongkong,	15,08,615	
{ Other Ports,	60,09,870	
France,	70,41,270	
Malta,	80,600	
Mauritius,	5,17,530	
New South Wales,	28,78,111	
Penang, Singapore and Malacca, ..	41,22,985	
Carried forward,	6,20,87,316	

Brought forward,	6,20,87,316
Persian Gulf,	80,000
Suez,	16,55,161
Bombay,	15,765
Bimlipatam, ... ..	.....
Madras,	11,56,345
Rangoon,	7,98,685
Pondicherry,	58,000

Total, Rupees, 6,58,46,272

And the Exports Rs. 62,15,295, of which Rs. 13,35,902 was sent to the Cape, Rs. 17,44,500 to China, and Rs. 7,05,618 to Rangoon.

AREA AND POPULATION OF INDIA.

Blue Book, 27th July, 1857.

BRITISH STATES.

DISTRICT.	AREA.	POP.
Lahore,	<i>Sq. Miles.</i> 2,826	591,688
Umritsur,	2,024	884,429
Goordaspoor,	1,675	787,417
Goojranwalla,	3,752	553,383
Sealkote,	1,350	641,782
Rawul Pindce,	5,996	553,750
Jhelum,	5,350	429,420
Goojrat,	1,916	517,626
Shahpore,	3,500	261,692
Mooltan,	5,634	411,386
Jhung,	5,718	251,769
Googaira,	4,142	308,020
Leia,	6,122	309,696
Khangurh,	1,027	211,920
Dehra Gazec Khan,	4,000	238,964
— Ismael Khan,	4,123	862,041
Peshawur,	2,324	450,099
Hazarah,	2,424	296,364
Kohat,	2,840	101,232
Jullundur,	1,381	708,728
Hoshyarpoor,	2,204	845,354
Carried forward,	70,328	97,16,755

DISTRICT.					AREA.	POP.
		Brought forward,	Sq. Miles.		70,328	97,16,755
Kangra,	...	..	...	...	3,207	718,955
		Total,	...	...	73,535	10,435,710
Umballah,	...	...	...	...	1,832	782,017
Thaneysur,	...	...	...	...	2,336	496,748
Loodiana,	..	...	..	...	1,377	527,722
Ferozepore,	...	..	...	...	2,545	475,624
		Total,	...	...	8,090	2,282,111
Oude,	...	..	...	...	25,000	5,000,000
Nagpore or Berar,	...	...	...	...	76,432	4,650,000
Rangoon,	..	...	...	...	9,800	137,130
Bassein,	..	...	..	...	8,900	128,189
Prome,	...	...	...	...	5,500	100,000
Henzada,	...	...	...	...	2 200	103,775
Toungoo,	..	...	...	...	3,950	34,957
Tharawaddy,	...	...	...	...	1,950	66,129
		Total,	...	...	32,250	570,180
Amherst,	...	...	...	}	29,168	115,431
Tavoy,	...	...	...
Ye,	..	...	...
Mergui,	...	...	...
EASTERN STRAITS SETTLEMENTS.						
Penang,	...	...	...	...	160	
Prov. Wellesley,	...	...	...	...	140	
		Total,	...	...	300	91,098
Singapore,	...	..	...	...	275	57,421
Malacca,	...	...	...	...	1,000	54,021
		Total,	...	...	1,575	202,540
Total under the direct administration of the Governor-General of India in Council,					246,050	23,255,972

BENGAL.

Patna, ...	...	...	...	...	1,828	1,200,000
Shahabad, ...	...	...	...	...	4,403	1,600,000
Behar, ..	...	...	...	...	5,694	2,500,000
Sarun with Chumparun, ...	...	...	...	...	6,394	1,700,000
Total,					18,319	7,000,000

DISTRICT.					AREA.	POP.
Bhaugulpore,...	...	...	...	<i>Sq. Miles.</i>	7,803	2,000,000
Dinajpore,	...	...	...	...	3,820	1,200,000
Monghyr,	...	...	...	...	3,592	800,000
Poorneah,	...	...	...	...	5,712	1,600,000
Tirhoot,	...	...	...	...	6,114	2 400,000
Maldah,	...	...	...	...	1,288	431,000
Total,					28,329	8,431,000
Moorshedabad,	...	...	...	...	1,856	1,045,000
Bagoorah,	...	...	...	...	2,160	900,000
Rungpore,	...	...	...	...	4,130	2,559,000
Rajshahye,	...	...	...	...	2,081	671,000
Pubna ...	...	...	...	...	2,606	600 000
Beerbhoom,	...	...	...	...	3,114	1,040,876
Total,					15,950	6,815,876
Dacca,	...	...	...	...	1,960	600,000
Furreedpore,	...	...	...	...	2,052	855,000
Mymensing,	...	...	...	...	4,712	1,487,000
Sylhet, including Jyntea,	...	...	...	...	8,424	380,000
Backergunge,	...	...	...	...	3,794	733,800
Total,					20,942	4,055,800
Jessore,	...	...	...	...	3,512	381,744
Twenty-four Pergunnahs, including City of Calcutta,	...	...	...	...	2,277	701,182
Burdwan,	...	...	...	...	2,224	1,854 152
Hooghly,	...	...	...	...	2,007	1,520,840
Nuddea,	...	...	...	...	2,942	298,736
Bancoorah,	...	...	...	...	1,476	480,000
Paraset,	...	...	...	...	1,424	522,000
Total,					15,862	5,758,654
From Saugor Island on the West, to the } Ramnabad Channel on the East,	...	...	...	...	6,500	not known.
Chittagong,	...	...	...	...	2,717	1,000,000
Tipperah and Bulloah,	...	...	...	...	4,850	{ 806,950 600,000
Total, ...					7,567	2,406,950

DISTRICT.	AREA.	POP.
Cuttack, and Pooree,	<i>Sq. Miles.</i> 4,829	1,000,000
Balasore,	1,876	556,395
Koordah,	930	571,160
Midnapore with Hidgellee, ..	5,029	666,328
Total,	12,664	2,793,883
Grand Total,	126,133	37,262,163

NON-REGULATION PROVINCES.

UPPER.	{	Joorhat, or Seebpoor,	...	...	2,825	200,000
		Luckimpoor,	...	...	2,950	30,000
		Sudiya, including Muttruck,	...	...	6,942	30,000
LOWER.	{	Kamroop,	...	...	2,788	300,000
		Nowgong,	...	...	4,160	70,000
		Durrung,	...	...	2,000	80,000
Goalpara,		...	...	...	2,166	39,835
Total,					24,531	749,835
Cachar,		...	...	...	4,000	60,000
Territory resumed from Toola Ram Senahputtee,					2,160	5,015
Ramgurh,		...	...	...	8,524	372,216
Palamow,		...	...	...	3,468	482,500
Chota Nagpore,		...	...	...	5,808	
Pachete,		...	...	...	4,792	
Barabhoom,		...	...	...	860	772,340
Singbhoom,		...	...	...	2,944	
Sumbulpore,		...	...	...	4,693	274,000
Odeypore,		...	...	...	2,306	133,748
Total,					32,895	2,235,204
Akyab,		...	...	...	32,250	540,180
Sandoway,		...	...	...
Ramree,		...	...	...
Total under the administration of the } Lieutenant Governor of Bengal, ... }					221,969	40,852,397

NORTH-WESTERN PROVINCES.

Panaceput,	1,270	389,085
Hissar,	3,294	330,852
Delhi,	790	435,744
Rohatuck,	1,340	377,013
Goorgaon,	1,939	662,486
Total,	8,633	2,195,180

DISTRICT.				AREA.	POP.
Suharunpore, ...	...	...	<i>Sq. Miles.</i>	2,162	801,825
Mozuffernuggur, ...	...	...	...	1,646	672,861
Meerut, ...	...	...	...	2,200	1,135,072
Bolundshuhur, ...	...	...	...	1,824	778,342
Allyghur, ...	...	...	...	2,153	1,134,565
Total, ...				9,985	4,522,165
Bijnor, ...	...	...	...	1,900	695,521
Moradabad, ...	...	...	...	2,699	1,138,461
Budaon, ...	...	...	...	2,402	1,019,161
Bareilly, ...	...	...	...	3,119	1,378,268
Shahjuhanpore, ...	...	...	...	2,308	986,096
Total, ...				12,428	5,217,507
Muttra, ...	...	...	...	1,613	862,909
Agra, ...	...	...	...	1,865	1,001,961
Furruckabad, ...	...	...	...	2,123	1,064,607
Mynpoorie, ...	...	...	...	2,020	832,714
Etawah, ...	...	...	...	1,677	610,965
Total, ...				9,298	4,373,156
Cawnpore, ...	...	...	...	2,348	1,174,556
Futtehpore, ...	...	...	...	1,583	679,787
Humeerpore, ...	...	...	...	2,242	548,604
Banda, ...	...	...	...	3,010	743,872
Allahabad, ...	...	...	...	2,788	1,379,788
Total, ...				11,971	4,526,607
Goruckpore, ...	...	...	...	7,340	3,087,874
Azimgurh, ...	...	...	...	2,516	1,653,251
Jounpoor, ...	...	...	...	1,552	1,143,749
Mirzapore, ...	...	...	...	51,52	1,104,315
Benares, ...	...	...	...	996	851,757
Ghazeepore, ...	...	...	...	2,181	1,596,324
Total, ...				19,737	9,437,270
Grand Total, ...				72,052	30,271,885

NON-REGULATION PROVINCES.

Kumaon, including Ghurwal,	6,962	605,910
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DISTRICT.			AREA.	POP.
Jaunsar and Bawar, ...		<i>Sq. Miles.</i>	579	24,684
Dehra Dhoon,	673	32,083
Khote Kasim, ...	...	...	70	13,767
Bhutti Territory, ...	...	...	3,017	112,974
Jaloun and Jansi, ...	...	...	4,405	376,297
Ajmere, ...	...	...	2,029	224,891
British Mhairwarrah, ...	...	...	282	37,715
Saugor, ...	...	...	1,857	305,591
Jubbulpore, ...	...	...	6,237	442,771
Hoshungabad, ...	...	...	1,916	242,641
Seonee, ...	...	...	1,459	227,070
Dumoh, ...	...	...	2,428	363,584
Nursingpore, ...	...	...	501	254,486
Baitool, ...	...	...	990	93,441
Total, ...			15,388	1,929,587
British Nimaar, ...	...	...	302	25,400
Total under Lieut.-Governor of the North Western Pro- vinces, ...			105,759	33,655,193

MADRAS.

Rajahmundry, ...	...	...	4,501	1,012,036
Masulipatam, ...	...	...	4,711	520,866
Guntoor, ...	...	...	4,752	570,083
Kurnool, ...	...	...	3,278	273,190
Cuddapah, ...	...	...	13,298	1,451,921
Nellore, ...	...	...	7,959	935,690
Bellary, ...	...	...	12,101	1,229,599
Arcot, N., ...	...	...	6,580	1,485,873
— S., ...	...	...	5,020	1,006,005
Chingleput, ...	...	...	2,717	583,462
Madras City, ...	...	...	27	720,000
Salem, ...	...	...	7,499	1,195,377
Coimbatore, ...	...	...	8,151	1,153,862
Canara, ...	...	...	7,152	1,056,333
Malabar, ...	...	...	6,050	1,514,909
Trichinopoly, ...	...	...	2,922	709,196
Tanjore, ...	...	...	3,781	1,676,086
Madura, ...	...	...	13,545	1,756,791
Tinnevely, ...	...	...	5,482	1,269,216
Total, ...			119,526	20,120,495

DISTRICT.

AREA.

POP.

NON-REGULATION DISTRICTS.

Ganjam,	<i>Sq. Miles.</i>	5,758	926,930
Vizagapatam, ... ..	...	4,690	1,254,272
Coorg, ... ..	...	2,116	135,600
Total, ... ..	...	12,564	2,316,802
Total under Madras Government, ...	...	132,090	22,437,297

BOMBAY.

Ahmedabad, ... ..	...	4,356	650,223
Kajra, ... ..	...	1,869	580,631
Broach, ... ..	...	1,319	290,984
Surat, ... ..	...	1,629	492,684
Tannah, ... ..	...	5,795	874,570
Candeish, ... ..	...	9,311	778,112
Bombay and Colaba Islands, including City } of Bombay, }	18	566,119	
Poonah, ... ..	...	5,298	666,006
Ahmednuggur, ... ..	...	9,931	995,585
Sholapore, ... ..	...	4,991	675,115
Rutnagerry, ... ..	...	3,964	665,238
Belgaum, ... ..	...	5,405	1,025,882
Dharwar, ... ..	...	3,837	754,385
Total, ... ..	...	57,723	9,015,534

NON-REGULATION PROVINCES.

Sattara, ... ..	...	10,222	
Sinde, ... ..	...	.....	1,005,771
Shikarpoor, ... ..	...	11,532	
Frontier District, ... ..	...	2,147	
Hydrabad, ... ..	...	26,760	
Kurrachee, ... ..	...	19,240	
Thur and Packur, ... ..	...	3,920	
Total, ... ..	...	63,599	1,768,737

Total under Bombay Government, ... 131,544 11,790,042

			AREA.	POP.
The Native States in Bengal, ...	Sq. Miles.	515,533	38,702,206	
" " Madras, ...	• ...	51,802	5,213,671	
" " Bombay, ...	• ...	60,575	4,460,370	
Total, ...	...	627,910	48,376,247	
Foreign States French, ...	...	188	203,887	
" Portugucze, ...	...	1,066	313,262	
Total,...	...	1,254	517,149	
Total of all India,...			1,466,576*	180,884,297

THE FOSSILS OF THE EASTERN PORTION OF THE GREAT BASALTIC DISTRICT OF INDIA.

Geological Papers on Western India.

THE great basaltic district of India extends for more than two hundred thousand square miles, and owes its formation to volcanic action. It is difficult to conceive of the grandeur that must have attended the appearing of this vast region, which was effected by eruptions separated from each other by various intervals of time. The fossils of such a district are therefore peculiarly valuable as affording guides by which the age of the great trap formation may be ascertained, and for connecting the great sandstone formations of the North and South of India. The basaltic district situated in two provinces, the Deccan; including all the country south of the Nerbudda, and that watered by the Southern branches of the Ganges, may be considered to be geologically connected by an elevated tract to the North West of Bundelcund. From the north of this station a number of rivers descend over sandstone escarpments into the valley of the Ganges and the Jumna. From the East and South of the same tract the Mahanuddy collects a great body of water, and after flowing through a country but very little known but containing the diamond mines of Sumbulpore flows into the Bay of Bengal. The Nerbudda flows in an opposite direction, and taking its rise to the west of Amercantack traverses a country of granite, sandstone and basalt abounding in iron, and the finest marbles, and finally debouches into the Indian Ocean through the alluvial plains of Guzerat.

All the other great rivers of the Peninsula, including the Godave-

* The area of Europe deducting Russia is 1,686,117 square miles, and its population, also deducting Russia, 189,475,968.

ry, Kistnah, Pennar and Cauvery, issue from the Western Ghāts from the summits of which the country slopes generally to the east, except to the extreme south, where the descent is precipitous. Of these rivers, the Pennar though comparatively a small stream, is of the greatest geological interest. The greater portion of its waters are derived from the district in which the diamond, sandstones and argillaceous limestones are exhibited in their most characteristic forms. The most remarkable phenomenon, however, in the district watered by this river is the horizontal summits of many of the ranges, and the distinct manner in which the continuity of the strata can be traced from one hill to another, although extensive plains intervene, while at no great distance the sandstone which forms the summits of these hills is seen on the same level as the surrounding plains. This succession of strata is nowhere more conspicuous than in the diamond mines of Bangnapilly.*

The plains at the foot of this table land consist of a rich black alluvium containing fragments of basalt and jasper, and its basis is a blue limestone abounding with springs. On ascending the limestone becomes paler and above Bangnapilly contains the diamond breccia.

On emerging from the Nulla Mulla range the Pennar enters the plains of the Carnatic, and flows through low hills of late-rite resting upon the ordinary granite of the Carnatic with its associated hornblende schist, quartz rock and mica slate. It is in a rock composed of the last two minerals that the copper mines of the Nellore district are situated. Between the Godavery and Kistnah rivers is a granitic platform intersected by numerous greenstone dikes, which are composed of a crystalline compound of hornblende and felspar. The greenstone generally known in India as black marble, is difficult to work but is susceptible of a most beautiful polish as in the mausoleums of Golcondah, the tombs of Hyder Ali and Tippoo Sultan at Seringapatam, and in many of the sculptures of the Carnatic pagodas. When these dikes were formed it is probable that the granite was in a fluid state.

In the granitic platform between Hyderabad and Nirmul several small basaltic hills are insulated. Their flat summits and steep sides correspond with the hills of the great trap district. The lower part of the hills is composed of laminæ of a sonorous trap and the upper of globular concentric basalt, themselves friable and soapy to the feel but their nuclei of a deep black colour and containing large crystals of olivine and small kernels of calcedony.

On approaching the Godavery the granite changes its appearance and contains large and beautiful crystals of red felspar imbedded

* Woodcut given in the Report.

occasionally in veins of transparent quartz, clouded with spots of a milky colour. The river flows over granite and its bed is covered by numerous fragments of calcedonies and zeolites. The banks are composed of a black basaltic soil from the lower part of which thin slabs of kunkur project. About twenty miles to the east of Nirmul hornblende slate occurs. From this schist the magnetic iron ore, employed for ages in the manufacture of the damask steel, is obtained. The mines are mere holes dug through the thin granitic soil, and the ore is detached by means of crow bars. It is then collected, broken and washed. The ore is then smelted with charcoal and apparently no flux is used. The iron thus made is obtained at once perfectly malleable and tough and is equal to the best descriptions of Swedish. The mines, which afford a boundless supply of ore, are situated in the neighbourhood of vast forests and near a river navigable for boats during a period of the year. The iron ore thus found in the great sandstone formation, affords an additional argument in favour of the opinion of those who consider this rock and the subjacent schists as equivalent to the older European sedimentary formations rather than to those of the supermedial order.

On approaching the Sichel hills the granite becomes softer and decomposes rapidly, and the soil changes to the basaltic mould known in India by the name of cotton ground, mixed with calcedonies, zeolites, &c. In the bed of a torrent some very perfect specimens of the *Paludina Deccanensis** have been discovered and fragments of other shells. The hills themselves extend from the junction of the Wurdah with the Godavery in a W. N. W. direction, and are arranged in terraces with steep sides and projecting spurs. Their extreme breadth from the Nirmul Pass to Yedlabad is forty miles. They enclose narrow valleys abounding in streams or support table lands covered with black soil. The water is nowhere far from the surface. Granite not only forms part of the base of the hills but part of the mountains themselves. To the north of the Koorm river extensive fossil beds have been discovered consisting generally of gyrogonites, unios and individuals belonging to the *Paludina Physa* and *Limnea*. On descending towards Hutnoor granite presenting a concentric ligniform surface appears, but with this exception the basalt continues as before and *Paludinae* are found. There is much calcareous matter mixed with the soil and at Elchoda seams of a pure white pulverulent lime were found between layers of basalt. At Hutnoor fragments of blue limestone not dissimilar to that occurring in the diamond district are common. On the second terrace the surface rock is changed to a white limestone composed of large

* See Plate III. Figure 20.

bivalve shells, the edges of which are decomposing rapidly. The continuation of the stratum is buried under an accumulation of basaltic debris from an overhanging spur. Towards the foot of the Pass the rock changes from nodular basalt to amygdaloid and a little further on the granite reappears. The country surrounding Yedlabad is covered by a deep basaltic soil, and the bed of the stream near the town is strewn with fragments of blue limestone. At Zynad argillaceous limestone appears on the surface and between the strata, which are generally horizontal, rock crystal and calcareous spar are distributed in thin seams. On the surface kunkur is very abundant, and since along the vertical partings of the strata there are rows of circular cavities it is probable that the stuff was the deposit of limestone held in solution by water and gaseous fluids issuing from the lines of fissure.

To the east of the village of Zynad there is a gentle elevation composed of limestone extending for three miles, and terminating in a small conical summit composed of basalt which has broken through the limestone. To the north of this place as far as the Payne-Gunga river the country is flat, covered with basaltic soil connected with trap hills and intermixed with jaspers. To the north of the river limestone is seen, and masses of white kunkur. Still further towards the Pindec hills sandstone appears on the south bank of a ravine, and on the opposite side at a lower level argillaceous limestone, through which hot springs with a temperature of 87° force their way up. On the other side of the Pindec hills at Kair other hot springs of the same temperature whose water is remarkably agreeable to the taste occur. There kunkur is exhibited in all stages of formation ; so quickly is the deposit of kunkur formed that shells are entombed whilst adhering to the surface of the rock and tufts of grass are encrusted whilst their roots are still alive.

Sandstone forms the surface rock over the surrounding country its junction with the limestone being concealed by basaltic soil. In this sandstone, at the hill of Won, a fossil having a compact structure and of a deep black colour was discovered. The fact is of considerable interest as but few if any other fossils have been discovered in the sandstone of Southern India. To the north at Hingan Ghat considerable fragments of silicified palms and other plants have been found embedded in the chert lying on the basalt.

From Hingan Ghât to Nagpore the country presents no organic remains, the whole country being covered with a rich black soil from which insulated basaltic hills with flattened summits rise abruptly.

Mr. Malcolmson after describing the geological structure of the country between the Kistnah and Nagpore passes

on to the consideration of the origin of minerals in trap rocks. In this paper he endeavours to shew that Dr. Turner and others are entirely wrong in their supposition that all calcedonies, rock crystals, &c. when occurring in volcanic rocks are the result of infiltration. If such a supposition were correct he shews that since under every layer of basaltic soil in India calcareous matter is found deposited, such matter would appear in the cavities of trap rocks rather than such intractable substances, which is not the case. He therefore considers that the existence of minerals in trap rocks is owing to the play of the molecular attraction existing between similar particles of matter. Mr. Faraday by an ingenious experiment has shewn that retention of carbonic acid depends upon the absence of moisture, and not upon its subjectivity to pressure. Thus, admitting the igneous origin of trap rocks, the presence or absence of moisture during the various degrees of heat to which the rocks were exposed in the progress of eruption and of cooling accounts sufficiently for the phenomenon that the fossils of the basaltic district sometimes retain their carbonic acid, whilst the rock in which they occur has been fused by the surrounding basalt. Considering that the truth of the theory as to the origin of minerals in trap rocks has been established the report discusses the era of the great basalt formation, and considers that it was posterior to the deposition of the sandstones. With regard to the diamond sandstone and argillaceous limestone, Mr. Malcolmson considers that they belong to the more ancient secondary or even transition rocks. The fossils embedded by the basalt all belong to fresh water genera and to species which apparently no longer exist. Most of the specimens have however only been found in recent or tertiary formation, and it is therefore extremely probable that the basalt in which they are imbedded belongs to the tertiary epoch; with regard to the relative age of the laterite and trap it is probable that the trap has been protruded from below since the laterite assumed its present form.

SECUNDERABAD TO BEEDER.

Being Dr. Voysey's Notes on the Country.

The journal was commenced in January, 1819. The first objects of interest visited on the road were the tombs of Goloonda. They consist of large cupolas supported on square pilasters of granite of an extraordinary length, some of them being one solid

mass of at least 20 feet in height. The tomb is in the centre of the hall formed by the cupola and is made of greenstone. Of this greenstone a vein was discovered of about ten feet in width running east by south. Dr. Voysey minutely details the appearance of the country, and narrates how granite succeeded to trap and trap succeeds to granite. In many parts of his journey particularly between Secunderabad and Puttuncheroo the characteristics of the country were striking. Loggan stones and tors of the most grotesque appearance generally smaller than their pediment and piled three together, with tanks of some 25 miles in circumference, formed remarkable features. A vein of greenstone was discovered. It affected rhomboidal blocks and was penetrated with veins of quartz.

The river Manjira was crossed and the bund upon its banks, which were lined with granite, was observed to be full of magnetic iron sand. In all the streams passed in the journey which empty themselves in the Manjira carbonate of potash was observed.

The approach to the Godavery was over waving land entirely of trap and alluvium, and the height of the river two years before Dr. Voysey's visit was observed to have been thirty feet above its then present level. Near Oudeghir, the trap still continuing, iron clay very much resembling that of the Cape of Good Hope was seen. The route then led to Chillelah, Beeder being distant only about five coss.

Beeder is itself situated on a hill and is built upon a species of iron clay here found at the great elevation of 2000 feet above the level of the sea. The fort at Beeder was in a ruinous state for the builders finding the rock upon which it stood easily worked had cut it down level with the wall. The rock had subsequently mouldered, and the wall had been precipitated with it. At Beeder Dr. Voysey visited a button manufactory. After leaving Beeder the iron clay disappeared and was succeeded by trap soil interspersed with large masses of granite. Such continued to be the character of the country until Secunderabad was reached. In another part of the record Dr. Voysey remarks on some petrified shells found in the Gawilgerh range of hills.

MASULIPATAM TO GOA.

MASULIPATAM stands on the sea coast in nearly 16° N. latitude and is about 28 miles to the north of the principal embouchure of the Kistnah. The adjacent country is a plain which it is believed once formed the bottom of a lagoon. The

channel of the Kistnah, since altered, is supposed to have supplied much of the water. Towards Bezwarah gneiss makes its appearance, and there rises into a ridge six hundred feet in height. To the north east of Bezwarah are the diamond mines of Mallavelly where the gneiss is covered in some places by a conglomerate of sandstone. The diamonds are dug from a bed of gravel. The gneiss and granite continue to Hyderabad, and beyond to the village of Moonopilly, where they are covered by the great overlying trap formation. Near Beeder and sixteen miles east south east from that city the trap is overlain by an extensive laterite bed, two hundred feet thick, and extending to the west north west for twenty-eight miles. The laterite is a purply or brick red porous rock, filled with tubular cavities, empty, or containing white clay or blue tinted lithomargic earth. The sides of the cavities are ferruginous. The rock when not exposed to the air may be cut by a spade but hardens by exposure. Veins of manganese associated with oxide of iron sometimes occur in the laterite. On the side of those veins the laterite is so hard as to stand out in relief from the weathered portions of the rock. The laterite of Beeder is used for building walls and for the revetments of ditches. At Calliany a bazar has been excavated in the laterite cliffs. Beyond Murbi the laterite disappears, and trap with its associated wacke, amygdaloids and kunkur are alone met with. At the town ferruginous nodules existing in the laterite are collected, and after being roasted and coarsely ground are smelted. About ten miles to the south of Gulburgah beds of limestone outcrop from the trap and form the bed of the Bhima at Firozabad. At a little distance from the right bank of the river the trap again covers the limestone and continues to Inglisswara, where laterite appears. Trap then continues and is replaced by gneiss, which towards the junction of the Kistnah and Gutpurba is capped by limestone. To the west of the falls of Gokauk there is a limestone and sandstone formation succeeded by granitic rocks capped towards Goa by laterite.

THE GEOLOGY OF A PORTION OF THE DECCAN.

ON the 23rd of January, 1839 Colonel W. H. Sykes, F. R. S. F. G. S. F. L. S. read a paper before the Geological Society on the Geology of that portion of India lying between the parallels of 15° 45' and 19° 27' north latitude and 73° 30' and 75° 53' east longitude. The tract thus comprised extended over a district of 26,000 square miles and was remarkable for the

amazing extent of the trap region and the horizontal position of its stratified beds. But there were other prominent geological features besides the extent of the trap formation. The whole country had a granitic basis ; trap veins occurred in granite ; peculiar nodular limestone and laterite formations were widely extended ; pulverulent limestone occurred in seams, and negatively, the country was remarkable for the absence of that uniform series of rocks which constitute the formations of Europe, and for the non-discovery of any fossil remains of extinct animals.

GEOLOGY OF THE ISLAND OF BOMBAY.

THERE are two papers on the Geology of the Island of Bombay printed in the Government records. One is by Mr. H. J. Carter and the other by Dr. G. Buist.

The Island of Bombay is one of a multitude of islands on the north-western coast of Hindostan. The group to which it belongs consist of about twenty islands, of which fourteen are well known. The principal rocks throughout this group are volcanic, and it is probable that the islands are all of the same age. In the formation of Bombay there have been four distinct periods :—1st. That of the primary volcanic or trappean effusions. 2nd. That of the deposit of fresh water strata. 3rd. That of the secondary or subsequent volcanic effusions, and 4th. The deposit of the marine strata. The fresh-water formation, as is proved by the absence of marine fossils, was deposited in a lake or river. The upper part of this formation, for 36 feet below the igneous rock that overlies it, is seen entire. Below this its strata have been broken up by igneous rocks. It is certain that this lake extended over the whole of the Island of Bombay, and it is probable that it extended as far as Ghora Bunder in the northern extremity of Salsette. In this formation there are the remains of wood, fruit and leaves. These appear to have been brought from a distance. It also appears that plants like large bulrushes grew in the lake and that it swarmed with cypridæ. The waters of the lake it is probable were dried up or diverted by a stream of molten larva. This was the first of the secondary volcanic effusions. The third period commences at this period. The irruption at present measures ninety feet thick on the eastern side, fifty-one feet thick on the western side of the Island. Thus immediately after this effusion it is probable that Bombay was black arid plain. After this effusion had hardened there was a second from below. The second effusion it is apparent could not find a ready outlet ; it therefore followed the course of the

fresh water strata before it. These it intercalated and broke up into fragments. This effusion and the third effusion, it is probable, took a prominent part in raising up the longitudinal ridges running north east and south west which border the eastern and western sides of the Island. To these trappito basaltic and amygdaloidal effusions succeeded a third, which Mr. Carpenter styles the volcanic breccia. The interval that succeeded between the second and third effusions cannot be estimated. It is known however that the volcanic breccia succeeded to the amygdaloidal, for fragments of the latter are found amongst those fragments of heterogeneous rocks that compose the former. The principal characters of this effusion are, that it is composed chiefly of angular fragments of the fresh water formation which vary in size from particles that are invisible to the eye to pieces of ton's weight. These fragments form a continuous tract from Carnac Bunder to Sion. Mr. Carpenter considers this effusion to be contemporaneous with the lateritic formation, and is satisfied that it forced its way through the crusts of the previous rocks. There was yet another effusion. It is proved to have taken place by the existence of dikes of volcanic breccia.

The 4th period, it is believed, is not of a very ancient date. The marine deposit seems to belong to the post and newer pliocene formations. Bombay could never have been very long under water or very deeply immersed as the beaches scarcely exceed twenty feet in thickness. Mr. Carpenter here proceeds to describe those details from which the before mentioned inferences have been drawn.

As the report on the Geology of Bombay by Mr. Carpenter is thus speculative that by Dr. Buist treats of economic Geology. From Malabar Point to Mahaluxmee there is a fine continuous ridge of black basalt which continues with more or less interruption to Bassein. From the light-house at the extreme end of Colaba to Sion and on the eastern side of the Island there is a mass of trap. It is irregular, sometimes it sinks to the level of the sea, and at other times rises into knolls. Between these two ridges, the basaltic ridge from Malabar Point to Bassein and the greenstone and tuffaceous ridges last mentioned the Island is flat and for the most part below the level of the sea. This fact seems to prove that the Island has undergone elevation since the period of volcanic action ceased. Evidences of an upheaval and depression are further evident from the alluvium amid Bombay. The record here proceeds to give the surface formations described as 1. Lagoon formation. 2. Littoral concrete or raised sea beaches. 3. Blue clay or submerged and reclaimed silt. 4. Lower alluvium or old marine clay. 5. Red earth. The last formation is of a peculiar character. It is as its name indicates of a

bright red colour and is found lying immediately over greenstone or some similar variety of friable trap.* On first being exposed to the air it refuses to sustain vegetable life and it remains without vegetation during the wettest season. With moderate manuring it changes entirely its character and becomes a fine uniform unctuous soil remarkable for its fertility.

The marine and fresh water formations form natural reservoirs for water, the volcanic rocks preventing any exit. The basalt is nearly destitute of water but it is readily obtained in the sedimentary beds beneath the volcanic rocks. The greenstone affords abundance of wells and in the littoral concrete water may be obtained every where. The water there found usually rises and falls with the tide. Along the line of the sea shore water can be obtained at a depth of some ten feet. In the clay nearly all the wells are brackish, the clay around being impregnated with salt. From Matoonga to Sion water can be obtained at a depth of from ten to twenty-five feet. The report here enumerates the papers that have been written upon the Geology of Bombay.

THE TRAP FORMATION OF THE SAGAR DISTRICT.

CAPTAIN S. Coulthard submitted this paper to the Asiatic Society in 1829. The trap formation of Sagar is comprised within a district bounded on the north at Hirapur by a primitive range; on the south, to the south of the Nermada, by a primitive range, on the west by the longitude of Mayapur and on the east by a granite range crossing the Nermada at Jebelpoor and running in a northerly direction. This basin elongated east and west has in its bottom the sandstone deposit rising through the trap formation covered with a coating of lias or on the surface. It appears on the surface for one hundred and ten miles in a line drawn directly from Jebelpore to Sagar. From the western limits to the central part, that is from Mayapur to Sagar trap rocks darken the surface. At Sagar they rest on sandstone, which does not appear to have much between it and the proximate primitive rocks. The sandstone rock of this district itself contains more than 54,000 square miles, and may be considered as a continuation and a sort of north eastern bend, from Baroda as a point, of the rock of the Malabar Coast. The appearance of the trap militates on the whole against its being considered to have an igneous origin. In the limestone

* This must be received with caution.

of the trap no fossils had been found by Captain Coulthard but fresh-water shells and silicified wood have since been discovered in abundance.

ON THE GEOLOGY OF MALWA.

CAPTAIN Dangerfield's report on the Geology of Malwa, appeared first in Sir John Malcolm's Memoir of Central India. It has since been reprinted in a separate form.

Malwa is an elevated plain with its slope to the north. It constitutes the northern termination of an extensive trap formation. Malwa though bounded on all sides by hilly tracts contains none but table crowned hills varying from one hundred to three hundred feet in height. These mountains are distinctly stratified, and consist of alternate beds of basalt or trap and amygdaloid, from the great difference in the resistance made to decomposition by these strata their exposed ends acquire a very distinct character. The amygdaloid forms the great slope and the trap retains its original perpendicularity. This circumstance facilitates the construction of the forts so numerous in this part of the country. Below the Jaum Ghât in the Vindhya range about a mile from the Nerbudda between Mundleysir and Mhysir there is a cluster of basaltic columns. They rise from a small basaltic ridge. Their diameters vary from a foot to a foot and a half. Their general form is a prism of four or six sides. The basalt of which they are composed is of a brilliant black. The columns are both vertical and inclined. They dip to no particular point. The bed of the Nerbudda consists for a considerable portion of its course of basaltic rocks. These form numerous shallows and rapids. Below Chiculda until its entrance into Goozeerat the river is not navigable. Its bed is contracted by two hilly ranges and its course interrupted by elevated rocky ridges. The principal falls are three in number. They occur at Deyree, Sansadarah and at Hurrin Pall or Deer's Leap.

Between Mundleysir and Chiculda the banks of the Nerbudda are about 70 feet in height. They consist of a thin upper layer of rich vegetable mould, and two distinct strata of alluvium, from the upper of which muriate of soda is extracted by the natives. The lower stratum is impregnated with carbonate of soda. The soda is not extracted like the common salt but its efflorescence on the banks is collected. Above Mundleysir the northern bank becomes rocky and precipitous and consists of gently inclined beds, chiefly of greenstone slate with small in-

terspersed grains of mica, but the island of Mundatta consists of hornstone slate. Above this the banks are wooded and consist of low hills and deep ravines and water tanks. Iron ore abounds, but it is only smelted at Khautcote and Chandghur for the country is almost desolate. The ore is of good quality. This hilly tract corresponds to that below Chiculda which however is better peopled. It is inhabited chiefly by wild Bheel tribes and the Rajpeely hills near Broach are inhabited by the coolies. In these hills there are several cornelian mines. In the upper plains of Malwa there is but little diversity, trap rocks alternating with amygdaloid. In the plain the vegetable soil, a rich black loam, varies in depth from three to ten feet. Near Sultanpoor beyond Dhar there is a large bed of jasper and in the neighbouring hills a great variety of crystallized siliceous minerals abound.

Along the whole bed of the Chumbul is a broad bed of horizontally stratified tabular basalt. It is probably connected with the basaltic columns in Nemaaur. To the east of the Chumbul and extending the whole length of the province there is a narrow bed of cellular clay iron ore. It constitutes a low ridge of which the higher parts rest on sandstone. The ore is poor and is not worked. The northern portion of Malwa is chiefly occupied by sandstone and sandstone slates. The sandstones are generally very fine grained. The sandstones begin at a short distance south of Jowra and extend down the western boundary of Malwa.

At Cheetakairee iron ore is found in reniform or mammillated masses and is worked. To the west a compact greyish limestone appears. This rock again rises to the surface at Dewlia. From Bheindur to Kairoda the country gradually rises, but between Kairoda and the foot of the range that encloses the city of Oodeypoor the country is flat and swampy. The range itself is about 500 feet in height and is composed of either massive or columnar hornstone. Near the Oodeypoor valley a little to the southward of Deybaree is a fine lake. It is formed by a dam being thrown across the bed of the river Bedus which here flows through a chasm about one hundred feet in width. The dam is thirty-seven feet above the level of the lake, is 334 yards long and 110 yards broad at the top. This lake is however far inferior in its proportions to that at Oodeypoor which is supplied by the Goomety. The boundaries on either side of this lake are two mountains 700 feet in height. The dam closing the opening in the range through which the river burst is of marble. The height of this dam to the water's edge is fifty-four feet, its length is three furlongs and its breadth one hundred and ten yards. The lake is about eight miles long and four miles broad.

At Oodeypoor copper and lead are said to abound, and the mines to the northward and southward formerly produced a considerable revenue. At Oodeypoor there occurs a largely granular red limestone containing crystals of rather dark green serpentine and a very little mica. Granite again occurs at Jubboogaum. On the borders of Guzerat a coarse millstone is quarried and sent to Baroda and the neighbouring towns.

Of the geological character of the eastern and north eastern boundary of Malwa little knowledge had in 1823 been obtained. The country however consists of a broad hilly belt leading down to the lower plains of Bundelcund by the second range of the Vindhya.

GEOLOGY OF NAGPUR.

THIS paper only refers to the western part of Nagpur. It includes an area of twenty-four thousand square miles. "Its northern side is formed by the table-land stretching from the Mahadewa Hills on the north-west to the northern extremity of the Lānji Hills on the north-east; the south-eastern side is constituted partly by the chain last mentioned, and partly by a line drawn from its southern base to the junction of the Wein Gunga and Wardha, which latter river marks out nearly the whole of the south-western side." The district presents a water's bed from north to south. The most important rivers that flow through it are the Kanhan from the Mahadewa Hills, which at Kampti "receives the Pech from the same upland tract, and the Kolar,—the Wardhá, which is joined by the Wanna from the hills west of Nagpur, and by the Pain Ganga from the Nizam's country,—and the Wein Ganga, the largest of all, which on its left bank, is increased by the united streams of the Wagh, the Son and the Dewa, and by the Chulband, and on the right by the Kanhan, and Wardha, after its confluence with the latter of which it takes the name of the Pranhita, and ere long discharges its waters into the Godavari."

The geological structure of the territory whose extent we have mentioned has for sometime engaged the attention of scientific men. The first who examined it were unsuccessful in their search for fossils. In 1833, however, Dr. Malcolmson discovered *Unio Deccanensis*, *Physa Prinsepia*, *Paludina Deccanensis* and specimens of silicified wood, and since his time several productive sites for sandstone organisms have been met with. The paleontology of the district is in fact both varied and important. It is however the juxtaposition of trap sand-

stone and granite that invests the geology of Nagpore with special importance.

The greater part of the trap lies on the west in the shape of a parallelogram. Its greatest length is 120 miles and its breadth from fifty to sixty. Its south-western side is formed by the Wardhá, its south eastern side commences from Suit on the Wardhá to the north-west of Bhisí where its north-east side begins, and continues up the right bank of the Kanhán to the ancient Gond Fortress of Dewajad. At Dewajad the upland tract of Multai forms the north-west side and completes the parallelogram. In addition to this the main body of trap there is a development of it to the north.

The plutonic and metamorphic formation occurs principally to the north. This formation may be considered to form a parallelogram stretching between Nagpur and the Lanji hills of the same size as the trappean parallelogram and applied perpendicularly to it. A large outburst of granitic rocks occurs moreover in the upper portion of the Wagh river. In both the districts the general strike of the strata is north and south.

The sandstone formation exists in the central part of Nagpur and laterite occurs at various parts within the area. The report then goes on to describe "in a descending order" the thickness, nature and contents of the formations within the area whose boundaries have been previously assigned.

SUPERFICIAL FORMATION.

1. *Black Soil*.—It seldom exceeds twenty feet in depth and contains no organic remains of any antiquity.

2. *Red Soil*.—Is frequently fifty feet in depth and is for the most part unfossiliferous.

3. *Brown Clay*.—Both the red and black soils rest in this formation, which seldom exceeds twenty feet in depth and is not known to be fossiliferous. In its conglomerate however the tusks of a large mammal have been found.

4. *Laterite*.—This formation seldom exceeds 10 feet in depth. No fossils have been discovered in it, but to the east of Nagpur it contains diamond.

5, 6, 7.—The next rock to laterite is trap. This formation naturally divides itself into three heads, namely, overlying trap, aqueous formation and underlying trap. For the sake of perspicuity they are all considered under one head, trap.

The overlying trap is extremely varied, is of all tints, substance and structure. Its average depth is about 20 feet. The depth of the underlying trap is not known.

The fossils found in the fresh-water formation between the two are :—

" Small bones, probably reptilian.

Remains of a fresh-water tortoise.

Fish scales, both Cycloid and Ganoid, in great numbers.

Insects, found at Takli : Mr. Hunter enumerates about ten species of *Coleoptera*.

Entomostracaus ; five or six species of *Cypris*.

Mollusca, land and fresh-water, in great numbers. The following genera are enumerated :—

Bulimus,

Melania,

Limnæus.

Succinea,

Paludina,

Unio.

Physa,

Valvata,

Plant remains : Mr. Hunter enumerates :—

Fruits and seeds, about fifty species.

Leaves, exogenous, six forms.

„ endogenous, three or four.

Stems, exogenous, few species ; some specimens six feet in girth.

„ endogenous.

Roots, six or seven kinds.

Chara, seed vessels."

The relation which the underlying and overlying trap bear to each other is thus described in the report. " Before either of the volcanic rocks was poured out in our area, there had been deposited on the sandstone a stratum which must have been at least six feet thick. Over this there was spread a molten mass of lava, which hardened the surface of the stratum, and itself cooled into a flat sheet of globular basalt about 20 feet thick. After a period of repose the internal fires again became active, and discharged another effusion, which insinuate itself between the sandstone and the superior deposit ; and, accumulating in some parts more than in others, through force of tension, ruptured the superincumbent mass, tilting up the stratum and scattering the overlying trap, or, raising both stratum and trap above the level of the plain, either left it a flat-topped hill, or, with boiling surge, pushed up its summit gradually or by fitful efforts. In these convulsions, the more recent trap, where it has not tilted up the deposit altogether, has generally encroached upon it, entangling some of its fragments, converting the greater portion of it into a crumbling vesicular rock, or producing miniature outliers of amygdaloid from materials susceptible of the change."

3. *The Sandstone Formation*.—The report considers this under four heads :—1st. Coarse ferruginous sandstone, averaging a thickness of 25 feet. 2nd. A fine sandstone containing specks of mica, fossiliferous and with a thickness of perhaps 300 feet.

3rd. Red shale with a thickness of 30 feet and 4th, Limestone. The thickness of the limestone is perhaps 100 feet.

9. *Plutonic and metamorphic Rocks.*—In Nagpur the usual combinations of gneiss and quartz rock, mica and hornblende schist with massive granite occur but perhaps the most common rock is gneiss. The quartz rock yields gold but the principal ore that it yields is iron. This ore may be obtained in immense quantities in the district of Chanda “both on the east and west of the Wein Gangá. Near Dewalgaum, only three miles from the east bank of this navigable stream, which communicates by the Godávari with the Bay of Bengal, in the midst of a level country covered with jungle, there is a hill named Khandeswar, consisting of strata tilted up at an angle of 60°, or 70°, the dip being to the north. The summit of the hill is about 250 feet above the level of the plain, 100 feet being gradual ascent through jungle, and the remainder an abrupt wall of naked rock. The iron ore is for the most part specular though many specimens possess polarity, and seem to be magnetic. It is on the surface of the slope that it is most valuable; but the whole mass, from an unknown depth under ground to the highest peak above it, is richly laden with metal. This single hill might furnish iron for the construction of all the railroads that shall ever be made in India, and with its abundance of fuel and cheapness of labour, and convenience of situation, it is admirably adapted for an export trade to every part of the country. But besides this locality, there are others in the neighbourhood which could each contribute an unlimited supply of the same indispensable metal. Among these may be mentioned Lohará, Ogalpet, and Metápár, Bhánápur Mendá, and Gunjáwahi, which are all on the W. of the Wein Gangá; and at all of which places the ore seems to occur in quartz, and is sometimes granular, but for the most part compact.” The report proceeds to trace the geological history of the district.

Amongst the fossils discovered by Messrs. Hislop and Hunter in Central India was a cranium of a reptile that was submitted to Professor Owen. The fossil was found in the sandstone series of Mangali about sixty miles to the south of Nagpur. Professor Owen designates the species represented by this fossil “*Brachyops Laticeps*” and submits that it is closely allied to “*Labyrinthodont Batrachia*.” In a subsequent paper Mr. Hislop modified his views with regard to the Indian fresh water formation and divides them thus:—1. Upper sandstone series. 2. Laminated series embracing (i) arenaceous, carbonaceous and bituminous strata (ii) argillaceous shales and (iii) limestone. 3. Lower sandstone series.

FOSSIL FISH FROM THE TABLE LAND OF THE DECCAN.

THE author of this paper is Colonel Sykes. He says "considering the enormous development of trap covering some 200,000 square miles in the Deccan—the granitic basis of the whole peninsula of India,—the area occupied by laterite—the want of sedimentary rocks, and the hitherto total absence of organic marine fossils in the Deccan (for a few shells brought to notice by the late Dr. Malcolmson were either fluviatile or lacustrine),—the discovery of fossil fish on the margin of the trap region was a novelty necessarily of great interest, as indicative of the former submerged state of the peninsula of India." It is proposed to call the new specimen *Lepidotus Deccanensis*. It is remarkable for the slender proportions of the anterior part of the trunk and the thickness of the posterior part between the oval fin and the tail. The scales are perfectly smooth and the teeth are conical. Sir Philip Egerton thinks from specimens of this fish being generally found associated with terrestrial vegetable remains that it was an inshore fish.

THE GEOLOGY OF KOTAH.

THE village of Kotah is situated on a plain, on the left bank of the Ranheeta river twelve miles above its junction with the Godavery. It was from this locality that Dr. Walker obtained his specimens of fossil fish (*Lepidotus Deccanensis*.) At the station Dr. Walker conducted the experiment of boring for coal. No coal was however found. The surface formation in the immediate neighbourhood of Kotah consists of black regur or cotton soil, through this sandstone crops up, rising in ridges of hills to the height of some forty feet to the south of the station argillaceous limestone makes its appearance extending for about 150 yards. The layers of this rock vary in thickness from one eighth of an inch to a foot and are frequently separated from each other by seams of fibrous carbonate of lime. The report goes on to describe the deposits, succeeding each other from above downwards, as they were exhibited in boring for coal. To the report is appended a Note by Professor Owen on the Crocodilian remains of Kotah.

GEOLOGICAL NOTES ON TRACT BETWEEN BELLARY AND BIJAPPOOR.

THESE notes were taken by Captain Newbold, F. R. S. during a survey of the line of road connecting Bombay and Madras which lies between Bellary and the ancient Mohamedan capital Bijapoor. "They commence from Bellary, comprising a line of 164 miles, extending in a north-westerly direction through part of the Ceded Districts, the Nizam's dominions, and the Southern Muratha Country, crossing at right angles the courses of the Tumbuddra and Kistnah rivers as they hasten across the Peninsula from west to east, to add their tribute to the Indian Ocean." Between Bellary and Yailbenchi a distance of 15 miles, the plain is supported on granite and gneiss, and for the last 4 miles is covered to the depth of 18 feet with cotton soil. This soil in some instances rests on "kunker" which is burnt by the natives for lime. The "kunker" resembles the travertine of Italy. The "regur" or cotton soil continues, as far as Devasamudrum and derives additional fertility from being watered by numerous rivulets running from the bank at Daroji. The soil produces rice, wheat and sugar-cane. In some places it is impregnated with muriate of soda, and there are established a few salt manufactories. Beyond Devasamudrum to the Tumbuddra which, is crossed by basket boats to Mustoor, gneiss is the prevailing rock.

At Mustoor, the plain rises towards Umaluti, a walled village about 25 miles distant. Beyond Umaluti, the regur is succeeded by the debris of granitic rocks. The country is indifferently watered and the majority of the springs are brackish.

At Tawurghirry occurs a range of hills called "Caradi Guddi" from being infested by a number of bears which are attracted by the dwarf date that luxuriate in the neighbourhood.

Beyond Tawurghirry chlorite slate occurs, and at Idlapur large masses of kunker embedding hematitic iron ore are seen. The chloritic slate is in this neighbourhood replaced by quartz until it again appears near Cundigul. Beyond Cundigul gneiss again makes its appearance and is succeeded by granite. The report here goes on to describe the Kistnah which Captain Newbold crossed in the usual wicker baskets. After leaving the Kistnah, the plain rises to the north and on the rising ground on which stands the little fort of Beylhal the road is literally paved with *boules* of trap. From Umblanur the trap is observed to undergo many changes in texture and colour. In some case the rock is divided into rectangular and rhomboidal prisms which by the mysterious law of crystallization manifested

in both ancient and modern trappean rocks, from the microscopic atoms of augite and hornblende to the prodigious pillars of Staffa and the Giant's Causeway, often assume a pentagonal and hexagonal shape. From Bagwari to Mangoli, $15\frac{1}{2}$ miles south of Bijapore, the trap continues, but is at times overlaid with laterite, before however reaching Bijapore the trap is again a surface rock. That city stands on an immense sheet of overlying trap. The report here contains further notes on the route to Bellary from Bijapore by Kannighirry, and concludes with a notice of the great overlying trap formation of Central and Western India.

GEOLOGY OF THE SOUTHERN MAHRATTA COUNTRY.

THERE are two reports on the Geology of the Southern Mahratta Country, one by Dr. A. Christie and the second by Captain Newbold.

Dr. A. Christie observes that the "geognostical arrangement" of the rocks of the Indian peninsula is every where simple, the same formation being sometimes continuous for several hundred miles. The principle rocks are granite, transition rocks, old sea sandstone, trap rocks, and, superior to all this, a ferruginous clay-stone.

Granite is by far the most abundant rock in the Peninsula of India. It stretches from Cape Comorin to beyond Nagpore and Ellichpore, occupying a great part of the Carnatic, Malabar and Mysore, nearly the whole of the Nizam's dominions and a large part of Berar. It is also found in Malwa, Bundelcund, in the neighbourhood of Delhi, and some of the highest peaks of the Himalayas are composed of it; all the eastern portion of the Southern Mahratta Doab from Sungum to the British frontier consists of granite, but west of that it only occurs occasionally. Upon a superficial examination the granite of India might be pronounced to have several distinct structure but they all may be referred to the *lœminar*. The *lœmina* are often divided by natural seams; these seams becoming widened by the action of the weather account for the columnar and other appearances of the granite.

Granite is not generally employed in India as a building stone, it is used however for paving, and is hewn into handmills, two or four of which are a load for a bullock. These are the primeval mills of Scripture. The Hindoo temples at Anagoondy are built of granite. In one of the principle buildings is an extensive "colonnade, the columns

of which are light, with small pedestals and capitals and approaching somewhat in their proportions to the Grecian. Some of the pillars are tastefully carved with flowers. A few are in the form of caryatides. They support immense slabs of granite, which are carved on their under surface, so as to form an ornamental roof. The largest of these slabs, which are in the central part of the building are at least 30 feet long." The natives of India have a way of polishing granite, which communicates to it a black colour. They polish all kinds of stones by a mixture of powdered corundums and melted lac. The mixture being allowed to cool the stone is polished by being sprinkled with water and rubbed with these oblong masses.

The transition rocks occupy a large part of the Darwar and Canara districts and of the territory of Goa.

In the Southern Mahratta Country many varieties of clay slate are met with. Its principal colour are grey blue, greenish red and white. The grey variety is the most common. It occurs at Kulladghee, Darwar, Hoolgoor and Soonda.

Chlorite slate and tale slate have a wide distribution; both are met with throughout the whole of the central and southern parts of the Darwar district and in the western Ghâts.

Limestone occurs only in the north east part of the Darwar district, it is associated with clay slates and grey wacke, with the latter at Kulladghee.

Gneiss occurs in large quantities at Dummel and beds of it are met with at Nurgoond.

Beds of quartz are found among all the other transition rocks in this district.

Old red sandstone is one of the most extensive formations in India. In the Southern Mahratta Country it extends from Gudjunderghur to the north and north-east, as far as the Kistnah, some way into the Hyderabad country and from thence beyond Gokauk. It forms the summits of three insulated hills, those of Noulgoond, Nurgoond and Chick Nurgoond.

At Badamy, the hills, composed to their very bases of sandstone, have perfectly even summits, and are surrounded on all sides by vertical precipices. The hills have a height of probably 200 feet. The two small forts of Badamy are built upon these sandstone hills. The only ascent to them is by means of steps cut in the solid rock, the passage to which is between immense walls of rock 200 feet high.

Trap rocks occur extensively in different parts of India. In the Darwar district they do not occur in great abundance. In the neighbourhood of Belgaum the trap forms rounded hills. The most common rocks that occur in the trap formation are a loose greenstone, basalt and amygdaloid.

Ferruginous claystone, the laterite of Buchanan, occurs in great abundance in the Deccan, in Mysore, in the district of Cuddapah and Orissa. It extends all along the Western Coast from Fort Victoria to the Southern extremity of the Peninsula. It is met with in Ceylon and is almost the only rock of Malacca. In some places it contains numerous small nodules of clay iron stone. These are picked up by the natives and smelted in a rude furnace blown by the hand bellows, such as is used in Europe by the Gypsies.

Immense deposits of a black alluvial clay are met with in various parts of India. "It is denominated cotton ground, from the circumstance of that plant being always cultivated upon it. It is the regur soil of the ryots. It forms large plains throughout the whole of the Deccan; some of them sufficiently extensive to bring to mind the descriptions given by travellers of the Pampas of South America, or the steppes of Russia." Dr. Christie considers the soil to have originated from the disintegration of the trap rocks.

Captain Newbold proceeded westerly across the Mahratta Country, following the right bank of the Gutpurba to the falls of Gokauk having the Kolapore territory to the right. He does not consider regur to be the detritus of trap rocks, nor to have a "fluviatile origin." Its appearance in the Ceded Districts watered by the Tumbuddra, Pennaur and Hogri rivers, none of which touch the trap formation, militates against the first, and the fact that it is seen covering vast flat plains like seas, hundreds of miles from the banks of great rivers, is conclusive against the second.

On the south bank of the Gutpurba are some low hills running E. S. E. composed of breccia, and from these hills to the Sitadonga hills a plain covered with regur extends. The hills at Badamy and Gujunderghur are composed of sandstone. Beyond these hills through which the Gutpurba finds its way occurs the plain of Bagulcotta. It continues west to Kulladghi. At Bagulcotta a pale buff-coloured limestone occurs that might be applied to lithographic purposes. Talicotta is the most promising locality for lithographic limestone. About a mile from Kulladghi are slate quarries. They yield hones, roofing slates, slate pencils, and huge blocks for pillars of temples, Hindoo idols, &c.

At Hirasillaky five miles from Kulladghi are iron mines. The metal sells at from two to two and a half rupees the pukka maund of forty-eight seers. Land carriage is readily procurable.

The report here describes the geological formation of the country between Kulladghi and the falls of Gokauk.

The Gokauk and Cotabanghy hills form the eastern flank of the Western Ghats and run in a parallel direction. They are entered from the east by a picturesque gorge through which the Gutpurba emerges. The falls are about three miles and a half to the east of Gokauk. The road lies along the bottom and side of this defile on the right bank of the river which here varies in breadth from ninety to three hundred yards. "The Gutpurba, a little above the fall, is apparently about 250 yards across, but contracts to 80 as the brink of the chasm is approached; consequently, the density and velocity of the watery mass is much increased, and it hurries down the shelving tables of rock with frightful rapidity to its fall.

The fall over the face of the precipice seems slow and sullen from the velocity of the surface water of this rapid, and from the great denseness of the body; and it plunges heavily down with a deep thundering sound."

The falls are 178 feet in depth on the cliffs near the falls; on the right bank of the river is a small group of Hindoo temples, dedicated to Siva.

From the falls of Gokauk to the cantonment of Belgaum about $34\frac{1}{2}$ miles, the route is nearly south west across an elevated table-land sloping to the eastward, covered with alternate bands of red and black soil and intersected at Padshahpoor, which is about $11\frac{1}{2}$ miles from the falls, by curvilinear spurs and outlying hills. About a mile to the north east of Belgaum another sheet of trap is entered upon, it continues unto Baugwari, where the edge of the trap is seen reposing on the hypogene schists at the base of the trap hills close to the village.

From the banks of the Malpurba to Darwar, a direct distance of twenty-three miles, the country is hilly and picturesque. The soil covering this tract of country is usually reddish, and the result of the decay and washing of the neighbouring rocks. The rocks composing the hills are schists passing into slates and shales.

South of Darwar to the Mysore frontier near Bunwassi and Chundergooty the face of the country presents a plain diversified with a few smooth conoidal hills. The soil is reddish and alluvial, and is in some directions intersected by belts of cotton soil. Towards Bunwassi quartz rock prevails with greenstone dikes. A little to the south of Bunwassi the lofty rock of Chundergooty in Mysore, a mass of granitoidal gneiss divided by vertical and almost horizontal fissures rises from the schists. From Bunwassi E. N. E. to Savanoor the schists continue. They are intersected by dikes of greenstone accompanied by depositions of "kunker." Near the dikes crystals of liver and

brass coloured iron pyrites are scattered throughout the structure of the schists, and cotton soil alternates on these strips with red clayey alluvial soil.

Near Lackmaisir occurs a calcareous rock similar to the breccia di verde of Egypt which is susceptible of a high polish. From Gudduck east to the Ceded Districts the formations consist of gneiss, hornblendes, slate and granite. The Kupput hills are principally composed of hornblende and chloritic schists and mica slate. The beds of the Dhoni rivulet which rises in these hills contain gravel and sand in which gold dust is found, associated with magnetic iron sand, menaccanite iron ore, grains of platinum, &c. Manganese is also found in considerable quantities. Tippoo here excavated pits for gun flints.

The report concludes with stating the geographical position and extent of the various rocks of the South Mahratta Country. It is mainly the same as that by Dr. Christie, already summarised.

GEOLOGICAL REPORT ON THE BAGULKOT AND THE ADJOINING TALOOKS.

THE district described by Lieutenant Aytoun is included between the rivers Kistnah and Mulpurba on the north, south and east, and a line drawn through Gulguleh, Kulladghee and Badamy on the west. Its outline is nearly triangular, the two rivers forming the sides and the line drawn through Kulladghee the base. Its greatest length north and south is 50 miles, and its greatest breadth east and west 45.

In the district are four sandstone ranges which bend in the direction of the dominant strike of all the rocks from W. N. W. to E. S. E.

The ranges, extending 16 miles to the south of Kutteegceree, are separated by valleys, in which limestone and schistose rocks are developed, in general covered with black cotton soil.

The first sandstone range extends from Beelgee to Gulguleh and rises to the height of 100 feet. The sandstone rests on grits and conglomerates and these last on granite. About three miles from Beelgee on the road to Gulguleh, trap makes its appearance.

The second sandstone range is about 180 feet high and is composed of sandstone and conglomerate.

The third sandstone range is composed of a jasper conglomerate and a quartzose sandstone. The limestones in the

immediate vicinity of the range are impure, but become purer near the fourth sandstone range.

At Guddunkeeree there occurs an uncommon variety of breccia composed of schists and limestones in a base of calc spar.

In the valley of Kulladghee the rocks are extremely confused. The report however proceeds to describe them and mentions that at Alyoondie are some fine coloured marbles, coloured green principally with chlorite, and in the vicinity a fine-grained lithographic stone.

THE BASIN OF THE MULPURBA.

LIEUTENANT Aytoun in a second paper describes the basin of the Mulpurba in Belgaum. He mentions that it is bounded on the west by the last "ridge of the great overlying trap formation of the Deccan. On the north by the sandstone hills of the Gokank belt, which here sends an offset to the south, meeting an elevated belt of schistose rocks which forms the eastern boundary.

The river Mulpurba in its course to the north-east has forced a passage through the sandhills near Pursgurh.

The trap range on the west is about 400 feet high." The rocks met with are the hypogene schists principally. They have all been subject to the disturbing and metamorphic effect of igneous agency, and trap and sienite are developed in many places through the basin.

The report concludes with a description of the Kupputgood hills or gold district. The nucleus of the hills in the immediate neighbourhood of Dumul is granite. The main range is there about 1000 feet high. The gold is found amongst the chlorite slate hills to the west of Dumul.

The chlorite is highly quartzose and indurated. The development of iron pyrites is exceedingly great, and it might be imagined that the small quantity of gold now found in the nullahs was derived from this source. Pepites of gold of a pear shape have occasionally been found. The gold in Australia, when found in small pieces, has sometimes this appearance.

GEOLOGY OF CUTCH.

THE province of Cutch is situated between the 22° and 24° of north latitude and 68° and 70° of east longitude. It con-

tains about 6,500 square miles independently of the Grand Runn-which bounds it on the north. The province is hilly and rocky, with the exception of the southern coast which is a "dead flat covered with a fine rich soil." There are no constant streams, the river courses being merely channels for conveying the periodical floods to the seas. They contain at other times only detached pools.

Mr. Grant divides the country into eight distinct formations:—

1. Sienite and quartz rock. 2. Sandstone and clay with beds of coal. 3. Red sandstone. 4. Upper secondary formation. 5. Nummulitic limestone and marl. 6. Tertiary strata. 7. Alluvial deposits. 8. Volcanic and trappean rocks.

The only good example of sienite occurs at a hill called Calunja near the town of Nuggur in Parkur. Quartz rock is principally developed near the town of Mhurr.

Sandstone and clay occupies a considerable portion of the country as may be seen from the map that accompanies the report. The centre of the province is dotted with hills, the smaller of these are composed of a very ferruginous sandstone. Iron ore is principally extracted near the town of Doodye. In extracting the metal, "layers of very small pieces are disposed alternately with others of charcoal, in a rude open furnace, and exposed to the blast of two small bellows made of sheepskins. The metal, when fused, falls into a hole at the bottom of the furnace, whence it is transferred to an enclosed furnace, and subjected to similar blasts, until brought to a white heat, when it is taken out and beaten into a bar. No flux of any kind is used."

Coal is found in this formation and at Bhooj a stratum has been discovered eighteen inches thick. This bed was worked for some time, but the quality of coal extracted was bad. Near Seesaghud boring operations have been conducted but no coal was found. Near Mhurr occur beds of variegated marl and blue clay. From both of these alum is extracted. The manner in which the alum is prepared is simple. The earth in which it is discovered is quarried and exposed in heaps to the sun and air for about five months, "during which it burns spontaneously. It is next laid out in little beds similar to those of a field prepared for irrigation, and it is watered by a small stream for ten or fifteen days, by which time the aluminous matter accumulates into semicrystalline plates. This substance is boiled in water for about seven hours; after which, a third, or one half, by weight, of potash is added, and it is again boiled for a few hours, according to the strength of the ley. It is then poured into large open vessels, where, after settling for some time, it is washed, and the liquid drawn off, leaving an impure crystalline sediment. This is once more boiled, and when it arrives at a proper state,

which is learned by practice, it is poured into large earthen vessels with a small mouth, and sunk into the ground to prevent their breaking. After a time, the vessels are dug out, broken to pieces, and a lump of pure alum extracted. Six or eight measures by weight of alum are produced from ten measures of the substance from the irrigated beds, and four or five measures of potash. It is not so much esteemed in the Bombay market as that brought from China, on account of its yellow tinge."

The red sandstone formation occurs to the south of the coal series, and is separated from it by a low range of hills about six miles broad, composed of basaltic rocks and porphyry; associated with the red sandstone are beds of clay. One of these beds is aluminous and has been burning spontaneously for a long time. This bed has never been worked.

The most characteristic fossils found in the "upper secondary formation," which occupies hollows in the sandstone and coal formation, are ammonites. Eleven species have been collected.

Nummulitic limestone and marl extends from Luckput to a plain between the villages of Wage-ke-Pudda and Eyeraio, about 30 miles to the southward. The stone has the appearance of chalk and the surface soil is composed entirely of small fossils lying loose, called Luckput sixpences. The most characteristic fossils are nummulites, fascicolites, echini, galcrites, clypeasters and spatangi.

By the tertiary strata of Cutch is meant all that portion of the province that contains fossils of the tertiary period. They consist chiefly of a hard argillaceous grit covered by beds of pebbles or conglomerate. The principal deposit of fossil shells is at the village of Soomrow. The tertiary beds reach, in one place, to the town of Mhurr, a distance of 30 miles from the sea, and extend in a belt of a third of that breadth throughout the whole southern coast of the province. The alluvial deposits consist entirely of detritus washed from the hills, or of land recovered from the sea by the blowing up of sand. At *Mandavee*, an old ruin formerly the quay is now about three miles inland, and even now a considerable space composed of loose sand intervenes between the town and the sea. This space is continually increasing. "The same operation is in progress at places separated from the main waters of the gulf by small creeks.

Some of these inlets penetrate six or seven miles from the coast through a tract covered for miles in extent with shrubs. At low water these plants are exposed to their roots; but at high tides merely their upper branches are visible, so that the boats sail through a marine forest, the sails and yards frequently brushing against the boughs of the trees."

The district composed of volcanic and trappean rocks is one of the principal features of the geology of Cutch. The principal mass of igneous rocks lies towards the southern department of the province and forms a group of hills called the Doura range. The northern parts of the "range have, for the greater part, a flat, smooth outline; but in the interior of the group are many clusters of small, conical hills, arranged round a circular space enclosing a kind of hollow." Of the detached hills of volcanic origin, the principal is called the Denodur. It is situated near the shores of the Runn and is the largest and highest hill in the country. An irregular crater which is still visible leaves no doubt of its igneous origin.

The report contains other examples of the elevatory effects of volcanic action and mentions some igneous outbursts of apparently a very recent period at Wage-ke-Pudda and in the neighbourhood of Mhurr. The first view of that at Wage-ke-Pudda is very striking. It includes a space of about two square miles "blown out into a flat basin, the sides being broken into fissures with craters, ravines, and hollows; and the interior, or bed of the basin, interspersed with hillocks and cones of every variety of colour, black, red, yellow, and white, and with patches of cinders, similar to the refuse of a furnace." The whole looks as fresh as if the igneous agents were still in operation.

The paper concludes with a description of the Runn, which Capt. Grant considers to have been once covered with salt water. To the report is appended a systematic list of organic remains.

THE GEOLOGY OF THE COUNTRY BETWEEN HOSHUNGABAD AND NAGPOOR.

THIS paper is merely a summary, it was written by Lieutenant John Finnis in 1829.

The formations between Nagpoor and Hoshungabad "are trappean, primitive, transition, and secondary, and much intersected by veins of greenstone and trap."

The formations may be divided into five principal divisions.

The first division includes "the tract of country lying between Nagpoor and Baitool to the south bank of the Machna river.

An unvaried formation of trap occurs during the whole of this distance, and the face of the country is covered with round **waken** boulders."

The second division comprises the space within the Southern and Northern Gháts in the Machna. On the north bank of the

Machna trap no longer appears; it is followed by strata of quartz and mica schist.

The third division includes the country between the Machna river and the nulla, one and a half miles south of Keeslah. Here all traces of granite are lost and sandstone becomes general. The sandstone extends to Keeslah. About four miles from the Machna and three miles from the Bhora Nuddce seams of coal are displayed.

The fourth division comprises the low range of hills between Keeslah and Putroda. These hills form a part of the great range of Mahadeo hills. Kunkurs, and a mica schist formation occur in this division.

The fifth division extends from Putroda to the Nerbudda at Hoshungabad. After passing through the hills a rich field of cultivation opens to view, and the rocks are lost under the deep alluvial soil of the valley of the Nerbudda. The report closes with a list of specimens collected in the several districts.

PERIM ISLAND.

PERIM island is situated in the Gulf of Cambay nearly opposite the estuary of the Nerbudda river. It is separated from the coast of Guzerat by a channel about 75 fathoms deep and 500 yards in width. The island, which is surrounded by an extensive rock reef steep on all sides but the south, is three miles in circumference. The highest point of the island is not above 60 feet above the level of the sea. The "Perim light" is about 102 feet above water mark. The island is composed of tertiary strata; the south south east end terminates in a cliff which exposes horizontal beds of puddingstone separated by a sandy clay.

In an experimental boring at the town of Gogah, of the 369 feet gone through, the uppermost 74 consisted of sand and gravel, 11 feet, stiff black clay; 6 feet, sand and clay; 10 feet, soft sandstone alternating with thin seams of different coloured clays; sand and gravel 13 feet, and, lowermost, a very hard siliceous sandstone 9 feet thick. The inferior portion of the section is composed of a great bed of dark clay, which has been penetrated down to 246 feet, containing pyrites and broken shells." The fossils that have been discovered at Perim are a species of *dinotherium*, giraffe, and *boamatherium*, besides other forms which prove that the clay conglomerates of the gulf of Cambay contain in them the remains of a very extensive and varied fauna. The fossils mentioned are described at length in the report.

THE CORNELIAN MINES OF BAROACH.

THIS paper was written in 1815 by Mr. John Copland of the Bombay Medical Establishment. The mines are in the wildest part of the jungle and no human habitations are within seven miles, on account of the tigers with which the country abounds. The miners reside at Neemoodra, where alone the stones are burnt. The mines are shafts working perpendicularly downward, about four feet wide and some 50 feet in depth. The soil is gravelly and consists chiefly of quartz sand reddened by iron and a little clay. The cornelian nodules weigh from a few ounces to two or even three pounds, and are scattered in the greatest abundance. Their colour is blackish olive, others somewhat lighter and others lighter still. A native informed Mr. Copland that the first would be black when burnt, the second red and the third white. The stones after they are collected are brought to the village of Neemoodra every evening, spread on the ground, exposed to the sun and turned every fifteenth day until the time of burning, which is only once a year, one month before the commencement of the monsoon. They are then put into round earthen pots about 14 inches in diameter "the bottoms of which having been taken out, and the pots inverted (mouth downward), the pieces taken from the bottoms are put inside, and placed over the mouths to prevent the stones falling out; in this state the pots are placed side by side in a trench of indefinite length, but of which the depth and breadth are about two feet, having a layer of five or six inches of dry goat's dung below, and the same above the pots. This is set on fire about eight o'clock in the evening, all the fuel is consumed before day break, when the pots are removed from the trench to the open air for the stones to cool, which requires about three hours; after this they are taken out of the pots, piled into heaps and chipped, as when taken from the mines, to discover their quality, and are finally thrown into a pit, where they remain till called for (more to be out of the way of thieves than as constituting any part of the operation.) From Neemoodra the cornelians are carried to Cambay by the merchants who come from thence, where they are cut, and formed into the beautiful and much sought after ornaments peculiar to the place."

GEOLOGY OF PARTS OF SINDE.

THE notes were written by Captain N. Vicary in a journey between Kurrachee and Sukkur.

The harbour of Kurrachee is protected by two rocky islets and Minora Point. Minora Point is connected with the Hala range, which exhibit in descending order conglomerate, clay and sandstone, upper bone bed, sandstone fossils, lower bone bed, coarse arenaceo-calcareous rock with spatangi; pale arenaceous limestone with hipponyces, nummulites and charoidæ, nummulitic limestone and black slates.

At present no river discharges itself into the harbour at Kurrachee, but there is every reason to think that at one time a branch of the Indus discharged itself there. The sea breeze is continually drifting dry sand into the harbour and filling it up, and on the land side the harbour is gradually filling up from the quantity of detritus carried into it by every flood of rain.

At Munga Peer, which is a basin enclosed by hills, there are two hot springs. The springs are about half a mile apart. The water is sweet. The northernmost is 124° Fahr. the other is 99°. At Luckee hot springs again occur, in one of these the water is highly mineral, and contains sulphur combined with calcareous matter and some salt. A dense scum is constantly rising to the surface of the pond over the spring and some Sindees, constantly in attendance, skim it off, and take it away in order to obtain the sulphur that it contains. The water from this spring has a great reputation amongst the natives as a remedy in cutaneous diseases. Near the spring in a perpendicular face of rock is a hole about three inches in diameter. Some years since an inflammable gas issued from this, it became ignited and was known by the Sindees under the name of Puri-ka-Chiragh or the Peris Lamp.

Near Poeth at the centre of the Hala range is another hot spring. The water smells of sulphuretted hydrogen. On the left bank of the Gauj fossil bones were discovered in vast abundance. They were crocodilian.

THE BELOCHISTAN HILLS.

THE hill country, the subject of this paper by Captain Vicary, extends from Shiahpoor on the western side to Goojeroo on the east a distance of 90 miles, and from the sandstone ridge bordering the desert to the Murray Hills in a northerly direction about 50 miles.

The strike and direction of the ranges and of the valleys is nearly east and west and the mean dip southerly.

From the low sandstone range bordering the desert to the Murray Hills there are seven parallel ranges of mountains.

In the second sandstone range which extends to an unknown distance in an easterly direction the Jullock, Gundava and other passes are situated. The lower ranges of mountains nearest the Murray Hills and parallel with it are formed of a nummulitic limestone. The Murray hills rise to about 3,500 feet above the level of the sea. They present a precipitous escarpment to the southward and the stratification is nearly horizontal. The report closes with a description of the fossils from the nummulitic limestone of Beloochistan. It is followed by a notice by Dr. Fleming of the Geology of the Sooliman range.

THE GEOLOGY OF SINDE.

THERE are two papers on the geology of this province, one is by Mr. H. B. E. Frere and the second by Mr. H. J. Carter. The first is merely a letter addressed to Colonel Sykes announcing the despatch of certain tertiary fossils, chiefly bones of mammalia from the hills south west of the Munchar lake, and the other is more particularly on the larger forms of fossilised foraminifera in Sinde.

The description of the foraminifera passes from the "simple nautiloid form of *Operculina*, in which the spire and septa are all visible exteriorly, to *Assilina*, where they are more or less obscured in the centre; thence to *Nummulina* where there is an addition of compressed chambers on each side the central plane, expanding above and below into the globular form of *N. obtusa*; and elongating in *Alveolina*. Returning to the sub-genus of *Nummulina*, which presents the 'reticulated structure' above and below the central plane, we pass on to *Orbitoides*, where the characteristic spiro-central plane of the nautiloid forms of Foraminifera is beginning to disappear, and then to *Orbitolites*, where it is entirely lost; ending with *Cyclolina*, which bears the same relation, in the simplicity of its structure to *Orbitolites*, that *Operculina* bears to it."

Plates accompany the report.

GEOLOGY OF THE SOUTH EAST COAST OF ARABIA.

THE information continues in this Memoir by Mr. H. Carter was compiled chiefly from information obtained by Captain Sanders and Lieutenant Griev.

The report although it only mentions the south east coast of Arabia commences at the straits of the Persian gulf, from thence proceeds to Ras el Had, then follows the south eastern coast and its islands to the straits of Bab-el-Mandeb, and crossing over to Berbera pursues the African coast as far as Socotra. The report commences with a geographical description of the coast.

The mountains which form the promontory of Ras Massandam on the western side of the Persian gulf suddenly rise from four hundred feet, the height of a small island called Massandam, to two and three thousand, and as they progress south eastward to six thousand feet above the level of the sea. They are this height at Maskat where they are called the Jibal Fallah. They terminate at the "Devil's Gap," and are there 6228 feet high. Between the mountains and the coast is a plain called Batana, which extends to within 14 miles of Maskat. From the southern boundary of the Devil's Gap, the outlet of the great valley that ramifies up among the mountains of Oman, a group of mountains extends towards Ras el Had.

The eastern extremity of Arabia is truncated and presents a coast facing due east of about 20 miles in extent, with a sea cliff about 100 feet above the level of the sea.

The sea-cliff ceases after the eastern extremity is turned and the land sinks to the level of the sea.

"After Masira, the mainland begins to rise again, and a sea-cliff first commences at a Cape called Ras Kabret in 19° 57' N. lat. and 57° 48' E. long. The land, however, on the western side of the bay, called Ghobat Hasish which is a little to the north of Ras Kabret, is 80 feet above the sea, and goes on increasing in height, until it attains an altitude of 480 feet at Ras Markas, which is close to Ras Jazirah. On account of the coast here running north and south for 100 miles, and therefore obliquely to its general direction, which is NE. and SW., we not only see that the land rises towards the SW., but that it rises also towards the south.

From Ras Jazirah, where the cliff, from its height and whiteness, very much resembles that of the south-east of England between the North Foreland and Beachy Head, the coast gradually increases in elevation to 800 feet which is its height about the centre of Curiyah Muriyah Bay; but as we approach the south-western horn of this bay, its outline and horizontality become disturbed, and suddenly it attains an elevation of 4,000 feet, which it preserves, more or less, on to the Yaffai mountains, at the Straits of Bab el Mandeb.

Opposite Curiyah Muriyah Bay are five small islands, which, in point of size, are hardly more than the tops of so many mountains; they are about twenty miles off shore, and the largest and

highest, which is Hallaniyah, has a point 1,645 feet above the level of the sea. There are also two or three still smaller, much further on towards Aden, viz. opposite Hisn Ghorab, about sixty miles south-west of Makalla. These are all the islands on this coast.

The chief features of the land between Curiyah Muriyah Bay and the Straits of Bab el Mandeb are, that here and there it is more or less tabular in its outlines; here and there more or less broken into mountainous peaks; here and there more or less interrupted by ravines; five times by great valleys; and once (in the Bay of El Kammar) by a tract of low land forty to fifty miles in breadth, which, running SW. and NE. between the mountainous ridges of which this elevated coast is composed, thus separates them longitudinally as far as the eye can reach.

Throughout, the high land is more or less scarped upon the sea or the maritime plain, and the latter seldom more than ten miles in breadth. Its colour is for the most part white, particularly where it is weatherworn, but here and there black or brown, where it is confronted by, or mixed with, rocks of an igneous origin."

With regard to the geology of the south east coast of Arabia the first thing that strikes the enquirer is the continuity of the limestone formation, which extends a distance of 1125 miles. The next point of interest is the eruption by elevation and outpouring of igneous rocks along the great line of fracture that forms the coast, and lastly the elevation of the land from 4000 to 6000 feet above the level of the sea that half brought to light other formations lying beneath the white limestones.

The igneous rocks comprise all the principal kinds and most of the varieties, by far the greater part of them are hypogene, the rest volcanic. The presence of gneissic strata in the granite at Marbat shows that some "of this rock is at least secondary; and being mixed up with limestone in the same neighbourhood, identical, but for the changes which such formations undergo when similarly situated, with some of the white limestone series above, further shows that there is granite here, which may be of still later date even than that enveloping the gneiss." "The gneiss itself was not seen by Mr. Carter in situ.

On the north eastern part of the coast dioritic and euphotide rocks prevail. These at Masira and Ras Jibsh envelope jaspideous strata. At Maskat, Masira, Marbat, and perhaps Makalla, jaspideous strata are overlain by nummulitic strata, but are never covered by granite or dioritic rocks.

On the south eastern part of the coast there occurs a chain of volcanic forms up to and including Aden, these extend through every-

thing and from them extends an issue of black basalt and other volcanic rocks which cover in different places the maritime plain.

Throughout the coast the original localities of the eruption of igneous rocks appear to have been the principal ones of the subsequent eruptions and outpourings, with the exception of the volcanic rocks, which have come to the earth's surface, where the older igneous rocks do not appear.

The igneous formation Mr Carter considers to admit of three groups :—1st. The strata of which the highest scarps are composed. 2nd. The nummulitic or compact littoral deposit on the shores especially of Dofar. 3rd. The miliolitic or loose littoral deposit and 4th, the recent littoral deposit.

The first group admits of three divisions. The first or uppermost includes the white limestone series, which extends from the summit of the table land to the commencement of the coloured argillaceous strata. It consists of white calcareous strata of different degrees of hardness and fineness, and is more shelly above than below, and throughout is more or less charged with thin foraminifera. In some parts flints are imbedded. Towards the summit *Cyclolina* and *Alveolina* abound, with bivalves and univalves. Mr. Carter regrets that he cannot state more of the middle part of these strata. The lower most are more or less magnesian and in some parts dolomitic.

The second division comprises the coloured argillaceous series, estimated at 300 feet at Marbat, 175 feet at Ras Sejar and 1,000 feet at Ras Fartak. It consists of red, blue, green and yellow argillaceous strata, sandy shales, and impure limestone in which a red colour is predominant. It contains "in addition to *Orbitolina*, throughout, but most numerous in the lower part, species of *Echinodermata*, *Iocardium*, *Pecten*, *Plagiotoma*, *Exogyra*, *Ostrea*, and *Ammonites*, probably all of the Cretaceous Period."

The third and last division of this group is the micaceous sandstone of which Mr Carter saw so little that he can only state that it is of great thickness, and though laminated in some places is for the most part massive throughout.

At Marbat it is usually of a "ferruginous yellow ochreous colour" and at Ras Sejar its upper part, the only part exposed, is of a light greenish blue colour, veined here and there with white quartz.

The nummulitic series is seen best at Maskat, on the island of Masira, between Marbat and Ras Resat and at Makalla. At Maskat and Masira it rests on dioritic rocks and euphodite, at Marbat and Masira on the same kind of rocks with granite, presenting at all these places gypsums, and between Marbat and Resat on compact limestone without gypsum.

At Maskat and Masira it consists above of a yellowish compact limestone, pregnant with small foraminifera, below this shells abound and below this corals, then arenaceous limestone, pure sand and conglomerate.

As another part of Masira, on the island of Hammar el Nafur and at Ras Kariat it rests on clays.

Between Marbat and Ras Resat it consists of compact shelly limestone, with coralline limestone below followed by limestone conglomerate.

Mr. Carter was unable to detect Alveolina in these deposits.

The third group is chiefly characterised by its loose structure. It is not only met with on this coast but extends to the peninsula of Kattywar.

From the foregoing data Mr. Carter tabulates the aqueous strata at Maskat and on the south east coast of Arabia.

SUMMARY OF THE GEOLOGY OF INDIA.

THIS summary was written by Mr. Carter in 1853, and is reprinted from the Journal of the Royal Asiatic Society. It professes to give a short summary of all the principal facts and conclusions at which an attentive study of the observations of others, and his own experience have enabled him to arrive.

The portion of India summarised in this paper "is comprised within the Ganges and Jumna on the N. E. the Indus and Sutlej on the N. W. the Bay of Bengal and Arabian Sea respectively on the E. and W., and Cape Comorin on the S.; cutting off, however, that angular portion which is N. E. of a line extending from Delhi to Ferozepore, as this would entail a description of the Geology of the Sub-Himalayan range."

Within this tract are representatives of all the Geological series of Europe from the Oolitic period down to the present time, with metamorphic strata and plutonic and volcanic rocks in abundance.

The Oolitic deposits are the most interesting. They contain the coal beds of India iron ore, and a very fair lithographic limestone. In their metamorphic state they appear to afford the white marble of India, which together with the red coloured sandstone another part of the series, form the Taj Mahal at Agra and the sandstone, the material of all the principal buildings of the towns on the Jumna, from Mirzapore to Delhi.

At Ajmeer and elsewhere the same sandstone, apparently metamorphosed, yields lead and copper; copper is found in the shales also of this series; serpentine in Behar; steatite (potstone) in

many places ; magnesite near Jubbulpore, &c. and the researches of Captain Franklin and Jacquemont in Bundelkund, and Voysey in Southern India would seem to show that the original conglomerate, if not the real bed of the diamond, almost invariably accompanies the Oolitic series ; while the late discoveries of the Rev. Messrs. Hislop and Hunter in the neighbourhood of Nagpore have shown that these deposits abound in by far the most interesting fossils that the interior of India has yet afforded.

The so-called cornelian mines, again, at Rattanpore, about forty-two miles inland from the mouth of the Nerbudda, would appear to be in an old beach, chiefly formed of rounded flints from amygdaloidal rocks."

The report here goes on to enumerate the different formations with the districts in which they occur.

The sedimentary and igneous rocks of India may be thus tabularised :—

PROVISIONAL TABLE OF THE IGNEOUS AND SEDIMENTARY ROCKS OF INDIA.

POST-TERTIARY,		XIII.		X.	
POST-TERTIARY,	RECENT.	Deposits now taking place.	Trappean Effusions, 2nd Series.	
	XII.	{ Marine, ... }	{ Sands, Shells, and Conglomerates. Upper Blue Clay. Kunkur (Travertin). Regur. Kunkur.		
	POST-PLIOCENE.	{ Fresh-water, ... }			
TERTIARY,	XI.	{ Marine, ... }	{ Semi-consolidated or loose calcareous or siliceous Sands, Grita, Shells, and Conglomerates. River Conglomerates. Old Kunkur.	VIII.	
	XII.	{ Fresh-water, ... }			
	XIII.	{ Marine, ... }	{ Solid, coarse, shelly Limestone. Oyster beds, Calcareous, argillaceous, quartzose or sandy Conglomerates. Lower Blue Clay. Ossiferous Conglomerate.		
	XIV.	{ Fresh-water, ... }			
SECONDARY,	V.	{ Marine, ... }	{ Intertrappean Lacustrine Formation. Nummulitic Beds and White Marl. White Limestone, Arabia and Sind (1,400 feet ?) Upper Greensand and Gault, (Albien, D'Orbigny), Trichinopoly and Verdachellum. Lower Greensand (Neocomien, D'Orbigny) Pondicherry. Diamond Conglomerate ? Punna Sandstone.	Eruption of Felspathic and Hornblende Rocks.	
	VI.	{ Marine, ... }			
	VII.	{ Marine, ... }			
	VIII.	{ Marine, ... }			
PRIMARY,	IX.	{ Marine, ... }	{ Kattrra Shales, ... }	III.	
	X.	{ Fresh-water, ... }			
	XI.	{ Marine, ... }			
	XII.	{ Fresh-water, ... }			
PRIMITIVE,	XIII.	{ Marine, ... }	{ Tara Sandstone. (Old Red ? McClelland.) Transition Gneiss, with micaceous and hornblende Schistose Beds. Newer Clay Slate, with quartzose and steatitic Sandstone Beds.	Eruption of Felspathic Rocks. I. Primitive Plutonic Rocks.	
	XIV.	{ Marine, ... }			
	XV.	{ Fresh-water, ... }			
	XVI.	{ Marine, ... }			

The report contains a diagram in explanation of the table.

The theory of the geological formation of India is the following :—

“1st. That the Oolitic series, which appears to contain the coal beds of India, was deposited by rivers flowing from the north.

2nd. That the marine beds of this series (indicated by their shelly nature), at the southern extremity of India, and in Cutch, seem to point to the outskirts of this delta, or the margin of pure salt water during this period.

3rd. That this delta, viz. the greater part of India, was raised above the level of the sea before the Cretaceous and Nummulitic Periods commenced, while its eastern and western borders, extending to the Himalayas on one side, and in the direction of Sind and Beloochistan on the other, still remained under water.

4th. That the deposits of the Cretaceous and Nummulitic Periods, which now form part of the subranges of the Himalaya mountains, and the Hala range of Sind, &c. were formed and raised above the level of the sea, leaving a gulf on each side, one in the present course of the Ganges; and the other in the course of the Indus rivers.

5th. That the Miocene and Pliocene deposits were formed in these gulfs, and were also raised above the level of the sea, causing the latter to retreat almost to its present margin.

6th. That the alluvia of the Ganges and Indus were deposited.

With reference to the advent of the trappean effusions, it would seem—if the coal formation resting on ‘secondary trap’ in the Rajmahal hills should hereafter prove to be a part of the Oolitic deposits, as Dr. M’Clelland supposes, and also to have been deposit on this trap,—that the Trappean Period extended from the deposit of the Oolitic series down to the breaking up of the Miocene and Pliocene deposits, inclusively.

The diamond conglomerate would, then, have been formed after the commencement of the trappean effusions; as it rests upon the Oolitic series the deposits of the Intertrappean Lacustrine formation seem to indicate a long interval of volcanic cessation previous to the outpouring of the basalt, which overlies them in the great trappean district.”

With regard to the coal of the Oolitic period Mr. Carter quotes the opinions of Mr. Ritchie to shew that it will beat the English coal of the carboniferous period out of the market. Mr. Ritchie states :—“ I consider that it will be a valuable coal for steam purposes. At the mint, and also at this company’s workshops in Calcutta, it has been converted into coke nearly equal to that from England, and costing considerably less.”

The summary concludes with a list of authorities from which the information contained in it has been derived.

POLICE IN BENGAL.

Blue Book, dated 20th July, 1857.

ON 14th May, 1857, the Government of India submit to the Court of Directors their views on the reform of the Police. They are of opinion that each Lieutenant Governorship should be treated on its own merits, and that reform is most urgently needed in the Lower Provinces. They therefore confine their views to the Lieutenant Governorship of Bengal. They are unanimously of opinion that the appointment of one Police Commissioner for the whole of the Lower Provinces is not expedient, and that the Commissioners should exercise authority over the Police as well as other branches of the Executive. Mr. Peacock alone is of opinion that the Revenue Commissioners are unnecessary, and therefore proposes to abolish seven out of eight Commissionerships, and to appoint two or three Divisional Commissioners of Police. They consider also that a moveable corps of Military Police should be attached to each division, usually employed in station and escort duties, and ready to assist the civil police in case of need. They agree in the proposal to increase the pay of the Police, are unanimous as to the necessity of increasing the number of Deputy Magistrates, and submit the papers to the Court before taking any further steps.

On 28th April, 1854 the Governor of Bengal submits to the Government of India his views on the Police. The first error has been the separation of the offices of Magistrate and Collector, which has left one class of officers, the Collectors, of mature standing, highly paid and with very little work, and another class, the Magistrates, inadequately paid, with very heavy work, and without sufficient experience. "Those who are acquainted with the details of the system are aware that some explanation may be given of what appears, to many, a total want of all training throughout its different branches. But when people, not acquainted with the details, are told that a young civil officer, after being for some time an Assistant, when he is nothing in particular, is made a Magistrate; that after a few years, quitting the Magistracy for the revenue branch, he becomes a Collector; that after a few more years his next step of promotion takes him from revenue duties, and makes him a Judge; that if he be a

man of ability he will probably, from a Judgeship, be moved to the office of Commissioner of Revenue; and that the same ability will, in all probability, next promote him from a Revenue Commissionership back to the judicial bench in the Sudder Court,—when people hear that a civil officer thus oscillates through his whole career between executive and judicial duties, and that each step he gains is one which does not tend to fit him for the step that follows after—when people hear all this, what wonder can there be that the administrative system is condemned off-hand and that all the evidence given in explanation before Committees of Parliament, and then buried deep in folio blue books, wholly fails to remove the ill-impression that has been produced?” His Lordship considers that the true theory of government in India is the entire subjection of every executive officer in a district to a Commissioner at its head. “Even as regards judicial officers, His Lordship is inclined to think that a great advantage is gained by placing them in all matters of an executive nature directly under the Commissioner, just as the Sudder Court in its executive capacity is subordinate to the local Government and by leaving them independent only as regards their judicial decisions.” Applying this view his Lordship would equalize the salaries of the chief executive and chief judicial officer of every district, thus placing in each one Collector-Magistrate with control over the whole executive, and one Judge. “In every district there would be one or more covenanted Assistants (including Joint Magistrates and Deputy Collectors) who would be at the disposal of the executive chief, but available for employment under the Judge for some portion, say two days of the week, either as Assessors, or Assistant Judges, in the trial of cases before a full mofussil bench, or in the trial of small original suits, within the jurisdiction of a Moonsiff. The Assistants would thus gain experience in every department both judicial and executive; they would rise as they became qualified to the superior grade equivalent to that of Joint Magistrate and Deputy Collector; and at the end of ten or twelve years’ apprenticeship, they would be eligible for independent and responsible employment as either judicial or executive head of a district.” There would then be no further shifting from office to office, the best executive officer being usually appointed Commissioner, and the best judicial officer promoted to the Sudder. The standard of pay should be that of the Collector-Magistrate in the North-west. The present establishment is as follows :—

26 Judges,	...	...	...	at Rs. 30,000	Rs. 7,80,000
3 Magistrates and Collectors,	...	...	...	" 28,000	" 84,000
23 Collectors,	...	...	...	" 23,000	" 5,29,000
3 Collectors,	...	...	...	" 18,000	" 54,000
1 Magistrate,	...	...	...	" 28,000	" 28,000
25 Magistrates,	...	...	...	" 10,800	" 2,70,000
4 Joint Magistrates and Deputy Collectors,	...	...	...	" 18,000	" 72,000
4 Joint Magistrates and Deputy Collectors,	...	...	...	" 12,000	" 48,000
11 Joint Magistrates and Deputy Collectors,	...	...	...	" 8,400	" 92,400
100 .					Rs. 19,57,400

The future establishment would be

26 Judges,	...	...	...	" 27,000	" 7,02,000
30 Magistrates and Collectors,	...	...	...	" 27,000	" 8,10,000
22 Joint Magistrates and Deputy Collectors,	...	...	...	" 12,000	" 2,64,000
21 Joint Magistrates and Deputy Collectors,	...	...	...	" 8,400	" 1,76,400
					19,52,400

With a special allowance of Rs. 3,000 a year for the Judge,
and the Magistrate and Collector of the 24-Pergunnahs,
on account of the expence of a residence at the Presidency, 6,000

Rs. 19,58,400

His Lordship explains the effect of this measure on the prospects of the service, and observes, that every man raised to high office will have had about seven years independent executive or judicial charge of a district.

A Note is added to the Minute, dated 3rd December, 1853. In 1836 a Committee recommended that the offices of Magistrate and Collector should be separated. 1st, because all energy was thrown into the revenue work. 2nd, because as Government could not wait for its revenue attention was given to that, to the neglect of police work. 3rd, because men of sufficient standing to be Collector-Magistrates were not active enough for police work. 4th, that the Collector in a permanently settled province has no connection with the agriculturists but such as renders him unpopular. 5th, that the Collectors are apt to call in the police to aid fiscal operations, and 6th, that if the offices are separated each officer will attend to his own work undistracted. Both Lord Auckland and the Court of Directors were opposed to the separation, but it went on gradually, till in 1845, "matters stood as at present, that is to say, the magisterial and fiscal offices were disunited every where except in the three districts of Cuttack, and in the independent Joint Magistracies of Pubna, Malda, Bogra, Bulloah, Furcedpore, Bancoora, Baraset and Chumpanun." The result of fifteen years' experience has been unfavourable. There has been a grievous loss of power in maintaining a class of officers with little to do, but prohibited from rendering assistance in police matters, while the Magistrates have

been so inexperienced as frequently not to command the confidence either of the European or native community. "Under the present system, our Magistrates vary from eleven to five years' standing in the service. During that period, when between twenty-five and thirty-one years of age, they are charged with the preservation of peace and order, and with the security of life and property throughout large districts, the real representatives of the character and authority of Government in the eyes of the people, without any official superior at hand to control and guide them, or any but private and irresponsible advice to depend upon; and when at the age of thirty-one their experience is matured, and they have arrived at a period of life when the physical and intellectual powers are together in full vigour, they are transferred to another department of the service, for the special duties of which they have had little training, and that almost forgotten, and where their time is insufficiently occupied, and their energies rust until their turn comes for promotion to the judicial bench." The Secretary further remarks that it is impossible in a permanently settled for a Collector-Magistrate to call in the police to aid him in fiscal matters. He suggests that the opportunity should be taken to revise the arrangements of the service, and proposes the plan accepted and described by the Most Noble the Governor. A table is appended shewing the salaries of Civil officers in each district of Lower Bengal.

On 23rd November, 1854, Mr. Grant records his opinion on the proposed changes. Mr. Grant contends that the system of uniting the offices of Magistrate and Collector is not old, but new. They were united in 1830 or '31 and the experiment pronounced a failure in 1836. The old system was the union of Judge and Magistrate, which was only objectionable in principle so far as it combined the offices of prosecutor and Judge. That objection still continued to exist under the system of 1830, and will not be removed by the system proposed now.

"In 1836, with the offices of Collector and Magistrate united, the police of Bengal was felt to be amiss. Instead of 'any administrative reform,' which, going to the real root of the evil, would have corrected or alleviated it, what was done was, to place the two offices each in separate hands; after which change of system, of course, the police remained much what it was before. But because the disunion of the offices has done no good or little good to the police, have we any warrant for presuming that the reunion of the offices would do it any good? It is very true that we are pressed with the sense of police affairs in Bengal being amiss now. But what is the root of the evil? No one denies that police affairs in Bengal will continue

amiss, till an adequate constabulary force and trusty native officials in the Thannas are provided for it; till Bengal shall be put on an equal footing in this respect with the rest of India. Now no change of names, no shifting of offices will have any tendency to increase the constabulary force, or to give Bengal trusty native officials in the Thannas." What guarantee therefore is there that a Committee sitting six years hence may not undo all again? Mr. Grant does not deny that there is an objection to the inexperience of Magistrates. He only denies that the objection consists in the disunion of the offices. It sprung from the objectionable manner in which Government performed that task. They allotted the light task to a man on high pay, and the heavy task to the man on low pay. Mr. Grant had never heard "a practical objection to the present system which would not be avoided immediately and certainly, by the simple process of transposing the salaries of the two offices, of course with due regard to the public interests in making the appointments to each class of office." The arguments adduced in favour of the scheme from the analogy of other parts of India are unsound. In Bengal the Collector neither has nor ought to have any influence by reason of his office, moreover the wealth of Bengal makes a style of protection necessary which is not required in any other province, and as a simple matter of fact the Magistrates in Bengal, call them by Magistrates or what you will are more zealous, often more capable, than the Collector-Magistrates pronounced inefficient twenty years ago. There seems no reason to expect a better result now. One-fourth certainly of the gentlemen who make decent Collectors would make very bad Magistrates, and would have been totally incompetent to the double office. Are one-fourth the districts to be entrusted to incapable men? "or are we to have in so many districts the old man and the young man, both in one and the same line of official subordination, the young man at the top, and the old man, until the expiration of his 35th year of service at the bottom?" For these reasons Mr. Grant would oppose the reunion of the offices.

Further though recognizing the excellence of the Governor's scheme, and especially that portion of it which contemplates the creation of provincial Judges, he still disapproves portions of the plan. Mr. Grant holds that the first object should be to dissociate the office of thief catcher and prosecutor from that of criminal Judge; when this end is accomplished the Magistrate and Collector will be found to have been raised too high. Even as it is the power of a Judge is five times as great as that of the Magistrate. "We ought, in my opinion, to attract the soundest heads we can get to this office of Judge, on which in Bengal,

as in all other wealthy and highly civilized countries, the prosperity of agriculture and commerce depends more than on any other single office. In thinking of this subject, we should think not merely of the fact of the wealth and civilisation of Bengal, but also of the cause of it,—the institution of private property in land. The reasons which have induced the wise English people to make their courts all in all, to convert their Exchequer into an ordinary tribunal of justice, and to make their 'Collectors' mere taxgatherers, have already operated to a notable extent in Bengal. I am all for progress in this direction. I protest against going backwards." In a few years judging from experience under the new scheme it would be rare to see a Judge of capacity. It would be so difficult to get officers to work the Magistracy and Collectorate, and a bad officer in that position would be so troublesome that the refuse of the service only would be made Judges. The Government looks to the Magistrate and Collector, the people look to the Judge. Mr. Grant is unable to "support that part of the scheme which would place the Judge under the revenue and police Commissioner." The Judge should be independent, but he is not independent while his decisions are subject to the control of the Commissioner in any respect. The remark applies still more strongly to the subordinate Judges. The Sudder Court alone is competent to superintend all interior judicial officers.

Mr. Grant proceeds to submit his own scheme. He believes the evil of modern reforms in Bengal to be the accumulation of officers at the Sudder station. He would therefore give every Moonsiff criminal powers up to the extent of three months' imprisonment. The thannas should be reduced in size, and over every few a head thannadar placed. Over every few head thannadars, there should be a Deputy Magistrate selected from among the thannadars. The Sudder Amcens should be sent into the district with criminal powers say up to one year's imprisonment, and the officer now called Magistrate, deprived of all judicial powers whatever, should remain at the Sudder station and watch over the whole of the police. Mr. Grant would adapt the arrangements of the service to this system. "I would make the Assistants work at first in the departments of revenue minor criminal justice, *and minor civil justice*. In these departments they would gain their first increase to 500 rupees. Afterwards they might either take charge of a subdivision or work on at the station, with higher powers in those three departments. At every station I would have an officer on 700 rupees of the grade now called a 2d grade Joint Magistrate, and Deputy Collector, as the Lieutenant of the Magistrate, and of the Collector; working

under both, and ready to assume temporarily the place of either." From thence he would rise either to a chiefship of Police or to a Magistracy. There should be three grades of pay Rs. 1000, Rs. 1500, and Rs. 2500 promotion being by merit. Men incapable of high office but capable of Collectorate work, would then be left on either of the two higher grades, and incapable men would not be made Judges. From both these offices good men should be selected to be Judges. "From both these offices I would promote the good men, and none others to be Judges. If any one objects that I make men Judges who have never been Judges before, I reply, that so must all Judges be first made. But if any one objects that I make men Judges who have not had the opportunities of acquiring in the course of their previous training the knowledge and practice best adapted to form a good Judge in India, I affirm the contrary and I join issue on that question. As the affirmative has been demonstrated over and over again by the greatest authorities on Indian subjects, I will not stop to argue it here. The real fact is that whatever post-sil office an Indian civil servant is in, he begins doing essentially the work of a Judge when he first quits College; and he never leaves off doing it till he takes his annuity." From a Judgeship the promotion would be to a provincial Judgeship or a Commissionership, and thence in the regular line. This Mr. Grant believes would prove a working plan.

On 26th October, 1854, the Secretary to the Government of Bengal submits an application for permission to unite the offices of Collectors and Magistrate in Bengal, as vacancies may occur. On 3rd January, 1855 the Governor General in Council advises that the whole question of the Police in Bengal should be submitted to the Lieutenant Governor of Bengal, as his office has come into existence during the discussion of the question. The permission requested is declined pending a decision of the question.

On 1st March, 1855, the Lieut. Governor of Bengal records his opinion on the objections to the reunion of Magistrate and Collector offered by Mr. Grant. His Honour considers that the measure may be taken alone, that it has no necessary connection with the other measures of reform, though proposed at the same time.

"I suppose that every body will agree with the Honourable Member of Council in desiring that the constabulary force should be as large, and the pay of the police as high as the nature of the service requires, and the Government finances can afford. But I do not see why this expensive improvement, whenever the Government may be in a condition to make it, should not be made just as easily under Collector-Magistrates as

under separate Magistrates ; or what the change in the superior functionary has to do with the pay and numbers of the subordinates."

Even if the measure were contrary to sound principle it is all over India successful in practice. In Bengal especially no unsoundness in principle can exist, for the revenue is fixed, and the work of collection almost a mechanical routine.

"The question of the introduction or non introduction of the proposed measure seems to me mainly one of economy of power. We have Collectors whose duties are of a nature involving heavy responsibility, and requiring a certain maturity of discretion. They must, therefore, be persons of sufficient experience, and must be paid in proportion. Yet it is certain that their time is only partially occupied by the duties of their offices, and there is nothing in the nature of their duties which forms a reasonable objection to their employment as Magistrates. On the other hand, we have Magistrates overworked, and of immature experience, who, though they require naturally the immediate control of more experienced seniors, are practically very much left to themselves ; and who nevertheless exercise functions upon the punctual and discreet discharge of which more of the happiness of the people depends than upon the conduct of any other civil officers of the Government. To give these duties, or (as is proposed) a large portion of them, to the older and more experienced functionary, for whom occupation is declaredly wanting, and to place the junior in immediate subordination to the senior, seems to me a proposition most obviously and necessarily arising out of the circumstances—most sound, expedient, and right."

The objection that a fourth of the service are incompetent to perform the double duties, is an objection to the constitution of the service. There will always be a certain number of incompetents and the only remedy is to supersede them. The Lieut. Governor is therefore heartily in favour of the proposed union.

As to the other changes His Honour assents to the proposal for a grade of chief provincial Judges, and objects to the equalization of the salaries of the Judge and Collector. He also objects to the plan by which the Judge would in certain portions of his work be responsible to the Commissioner. His Honour considers the plan proposed by Mr. Grant for the redistribution of the service too expensive. "My plan would involve scarce any change in the number of officers now employed, or in the amount expended but would slightly reduce both. I would make all the present larger Collectorships, 22 in number, Collector-Magistracies on 24,000 per annum. I would make all the smaller Collectorships, such as Monghyr or Beerbhoom and all the independent Joint Magistracies and Deputy Col-

lectorships such as Pubna or Malda, Collector-Magistracies on 18,000. The total number of these would be eleven. (This would accord with the principle of the Honourable Member's plan of gradations of Magistrates and Collectors.) The Cuttack Collector-Magistracies, which are also Salt Agencies, I would have as at present, viz., 3 on 28,000. I would have 22 Joint Magistrates and Deputy Collectors on the present salaries of Magistrates, viz., 10,800, and, as at present 11 such officers on the lower salary of 8400. My total of officers employed would be 96, and the expense 19,20,000." He agrees that the zillah officers should be scattered, and fully concurs in the expediency of increasing the pay of the Police. On 8th May the Hon'ble J. P. Grant corrects certain misapprehensions as to his meaning, and affirms that his plan would not be expensive, considers that the Darogahs are as a class bad, and that their pay ought to be increased.

On 8th May, 1855, the Honorable J. Dorin observes :—" With projects for fresh outlay constantly before us, and these appeals for the correction of the general administration of the country that can hardly be resisted, we find ourselves with an excess of expenditure over income largely increasing, and which in the present year, or rather I should say the year just past, is estimated to amount to no less a sum than two millions and three quarters sterling."

On 19th May, the Honorable General Low believes either plan would work well, provided Government in the event of the continued division of the offices can afford to give adequate salaries to both.

On 15th May, 1856, the Honorable B. Peacock records his opinion that the reunion of the officers of Collector and Magistrate would be inexpedient, as the principle is obviously unsound.

On 30th April, 1856, the Honorable F. J. Halliday, Lieutenant Governor of Bengal, gives his opinion on Police and Criminal Justice in Bengal. For a long series of years, "complaints have been handed down from administration to administration regarding the badness of the mofussil police under the Government of Bengal, and as yet very little has been done to improve it." For although the pay of Darogahs has been increased, and the enormous size of certain Magistracies reduced, still the "establishments do not comprise more than seventy Executive Magistrates, Covenanted and Uncovenanted, over four hundred and eighty-four Thannahs, being at the average rate of about seven and a quarter Thannahs to each Magistrate, a proportion much below what is requisite; and the distribution of even this number of Magistrates is extremely irregular." The

village police though always believed to be the basis of a good Police Administration, "are kept in a permanent state of starvation, and though in former days Magistrates battled for them with unwilling Zemindars and villagers and were encouraged by Government to do so, it has been discovered in later times that this is all against the Law; and Magistrates, contrary to the doctrine of earlier times, have been actually prohibited from interfering in favour of village watchmen, it being ruled that this is altogether an affair of the people themselves, who may pay watchmen or not, just as they think fit. Village watchmen are now declared to have no legal right to remuneration for service, and (the help of the Magistrate being withdrawn,) they have no power to enforce their rights even if they had any rights to enforce. Hence they are all thieves or robbers or leagued with thieves and robbers, insomuch that when any one is robbed in a village, it is most probable that the first person suspected will be the village watchmen." In 1842, Mr. Millet was of opinion that it was optional with the villagers to pay the village watchmen, and though the Sudder Court have since decided that the Zemindar is bound to fill up the vacancy, they are still divided as to whether they are competent to enforce fulfilment of the obligation by a fine. Mr. Bethune on 27th May, 1851, adduced some strong figures to prove the corrupt state of the village Police, "it appears that the whole number of Chowkedars, (with the exception of six districts from which accounts had not been received when the table was compiled,) was 1,30,305, and, therefore, were they no worse than the rest of the population, the number of persons among them guilty of every kind of offence known to the calendar, at the rate of one in 1,219, would be under 107 annually, or 321 in the three years included in the return. What were the facts? The whole number of Chowkedars dismissed for misbehaviour in those three years, instead of 321, is 1,130.

Of whom, for Murder and Thuggee, ...	...	...	19
Burglary, ...	...	...	39
Robbery and Theft, ...	...	...	357
<hr/>			
Total, ...	...	...	415

that is to say:—

'Nearly one-fourth more, in proportion to their number, for these heinous crimes, than were convicted in all the Lower Provinces of Bengal for all offences of every kind.'" On 11th July, 1853, the Marquis of Dalhousie suggested a bill which extended the system now applicable to towns in which a Covenant Magistrate is stationed over the whole country. Mr. Peacock proved that such a measure would be an infringement

of the perpetual settlement; but observed that the villages were evidently by their constitution bound to support their watchmen. "With this view he suggested that a local investigation should be made in every village, throughout every zillah, of the liabilities to which the village is subject in respect of the maintenance of village police, in order to found thereon a legislative measure for the improvement of that institution. That investigation has now been completed."

The means of trying criminals however require as much improvement as the Police which "certainly do not command the confidence of the people." The people are singularly unwilling to prosecute partly perhaps from apathy but chiefly from dread of the police, and of the uncertainty of the proceeding in our Courts. This fear is well founded as it appears from the returns that of 14 burglaries committed only one is punished, and even in thefts the average of convictions to offences is three to eight. In more heinous cases which come before the Judges' Courts, the average of convictions is two to three of acquittals. And this although a very small proportion of heinous offenders are ever brought to trial.

One great cause of this evil is the inexperience of our Magistrates "whereas in 1850 the average standing of Magistrates was nine years and eight months, it had sunk in 1854 to eight years and five months, and is now, in 1856, so low as six years and ten months. 'In 1850,' says Mr. Grey, 'there were only two Magistrates below the standing of seven years. Now there are 15 such. The youngest officer officiating as a Magistrate in 1850 was of five years' standing. The youngest officer now officiating as Magistrate is of less than three years' standing.'" This evil is increasing. For these reasons the Lieutenant Governor would propose the following measures of reform:—

Chowkeedars.—The following important table shews how the village Chowkeedars are appointed throughout Bengal:—

Division.	DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkees to each dars.	Number of Houses to each Chowkeedar	HOW APPOINTED.	HOW PAID.
PATNA.	Chumparun, ...	3,578	1,81,881	3,809	48	By Gomastahs and head villagers.	Annually by grain ; some have from 5 cottahs to 20 beegahs of land each.
	Sarun, ...	4,347	2,10,425	5,926	36	Zemindars.	Ditto by cash, from 4 annas to 36 rupees, a few having cloths given them ; by grain from 2 to 24 maunds ; by land from 10 cottahs to 11 beegahs each.
	Patna, ...	3,908	1,32,122	4,380	30	Zemindars and villagers, confirmed by Magistrate.	Ditto by cash, from 8 annas to 36 rupees each ; by grain from 2 to 21 maunds each ; by land from 4 cottahs to 12 beegahs.
	Shahabad, ...	4,948	2,19,949	6,283	35	Zemindars or head villagers, or both.	Ditto cash, 4 annas to 36 ; grain 20 seers to 30 maunds ; land 10 cottahs to 24 beegahs each.
	Behar, ...	4,343	1,42,229	4,582	31	Landholder's omlah and the villagers.	Ditto cash, 12 annas to 36 rupees ; grain 2 to 25 maunds ; land 1 beegah to 5 beegahs each.
	Total, ...	21,124	8,86,606	24,980	—		

Division.	DISTRICT.	Number of Villages.	Number of Houses.	Number of Chow-keedars.	Number of Houses to each Chow-keedar.	HOW APPOINTED.	HOW PAID.
BHAUGULPORE.	Tirhoot,	5,473	3,33,485	7,895	42	Zemindars and some by villagers.	Annually by cash, 1 rupee 4 annas to 45 rupees, or land 1 cottah to 2 beegahs each, and a few receive a little grain.
	Purneah,	5,267	2,45,181	7,841	31	Landholders or villagers.	Ditto cash, 12 annas to 36 rupees each; some receive a little grain.
	Monghyr,	2,642	1,32,514	3,086	43	Zemindars.	Ditto cash, 1 rupee 2 annas to 36 rupees; land 8 cottahs to 15 beegahs each.
	Bhaugulpore,	3,740	1,71,482	3,687	47	Ditto.	Ditto cash, from 8 annas to 57 rupees; land from 1 beegah to 20 beegahs each.
Total,		17,122	8,82,662	22,509	—		

Division.	DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkedars.	Number of Houses to each Chowkedar.	HOW APPOINTED.	HOW PAID.
	Maldah, ...	1,950	91,817	1,568	58	By the head villagers.	Annually cash, 1 to 48 rupees each, some have grain.
	Dinapore, ...	8,517	2,05,051	5,592	37	Zemindars or head villagers.	Ditto cash, from 4 annas to 42 rupees each.
	Rungpore, ...	3,383	2,17,471	5,077	43	Some by headman, generally by zemindar's omrah, confirmed by the Magistrate.	Ditto cash, from 2 to 36 rupees each; in one thannah a little paddy is added.
	Bograh, ...	4,964	1,23,982	3,100	40	Head villagers, a few by the zemindars.	Ditto cash, from 1 to 36 rupees each.
	Pubnah, ...	3,526	1,81,811	3,611	50	Headmen.	Ditto ditto, 3 to 52 rupees each; a little grain given to some.
	Rajshahye, ...	3,416	1,41,913	3,839	37	Ditto.	Ditto ditto, 6 to 48 rupees each; one man has 15 beegahs of Chakeran.
	Total, ...	25,756	9,62,045	22,787	—		

Division.	DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkeedars.	Number of Houses to each Chowkeedar.	HOW APPOINTED.	HOW PAID.
Dacca.	Mymensing,	13,162	3,06,133	4,080	75	Head Villagers or police.	Annually cash, from 3 to 54 rupees each.
	Sylhet, ...	6,937	2,24,386	3,259	69	Landholders and villagees.	Ditto ditto, 1 to 30 rupees.
	Dacca, ...	3,163	2,32,023	4,026	58	Head villagers.	Ditto ditto, 6 to 36 rupees each, and a few are said to be paid monthly from 1 to 3 rupees each.
	Backergunge,	2,357	1,78,104	3,051	58	Landholders.	Ditto cash, from 7 to 42 rupees each.
	Furreedpore,	1,987	1,27,972	1,773	72	Headmen.	Ditto 1 to 52 rupees each ; some have grain.
	Total, ...	27,606	10,68,618	16,189	—		

Division.	DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkeedars.	Number of Houses to each Chowkeedar.	HOW APPOINTED.	HOW PAID.
CHITTAGONG.	Tipperah, ...	5,884	2,37,733	2,768	86	Headmen.	Annually cash, from 2 rupees 8 annas 9 pie to 57 rupees 8 annas each.
	Noacolly, ...	977	90,833	1,867	49	Ditto and police.	Cash, each Chowkeedar receives 12 annas per house monthly.
	Chittagong, ...	944	1,79,763	2,431	74	Head villagers.	Annually cash, from 6 to 30 rupees, some get grain too; and a few monthly at 2 rupees 8 annas each.
	Total, ...	7,805	5,08,329	7,066	—		
CUTTACK.	Pooree, ...	4,584	1,10,814	2,822	39	By Gomastashs and headmen.	Annually, by cash from 1 to 48 rupees; land 1 beegah to 65 beegahs each.
	Cuttack, ...	6,630	2,13,207	5,072	42	Zemindars, confirmed by the Magistrate.	Ditto cash, 1 to 55 rupees; land from 1 beegah to 40 beegahs each.
	Balasore, ...	4,317	96,457	1,978	49	Zemindars.	Ditto cash, 4 annas to 25 rupees; land 1 beegah to 25 beegahs each.
	Total, ...	15,531	4,20,478	9,872	—		

DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkedars.	Number of Houses to each Chowkedar.	HOW APPOINTED.	HOW PAID.
Midnapore,	11,198	2,95,145	9,123	32	Headmen or the Magistrate.	Annually cash, 2 to 61 rupees; land from 4 beegahs to 143 beegahs each.
Howrah, ...	1,412	98,756	1,465	67	Zemindars.	Ditto cash, from 19 rupees 4 annas to 39 rupees 12 annas, with some grain each.
Hooghly, ...	3,468	2,80,493	5,194	54	Zemindar and Magistrate.	Ditto cash, 3 to 60 rupees; land 1 beegah to 36 beegahs.
Burdwan, ...	2,873	2,13,036	8,848	24	Ditto.	Ditto cash, from 12 annas to 72 rupees, some have some land.
Beerbhoom,	6,928	1,88,182	10,850	17	Ditto, and some by Sirdars Ghatwals.	Ditto cash, from 12 annas to 136 rupees each; or land from 3 beegahs to 228 beegahs each; or land and grain, producing an estimated income from 25 to 42 rupees each.
The Chowkedars and the Ghatwals (who in Beerbhoom hold of the zemindar, but in Bancoorah of the Government) should have been distinguished.						
BANCORAH { Villages, Ghats, ...	2,879	1,95,018	3,934	32	Zemindars or villagers, confirmed by the Magistrate.	Ditto, from 8 annas to 7½ rupees, and also in kind.
	1,127	28,388	4,825	7	By the Magistrate.	By land held of Government under engagements with the old Rajah of Bishenpore, at from 2½ beegahs to 4,152 beegahs per man.
Total		29,585	12,29,619	43,739	—	

DISTRICT.	Number of Villages.	Number of Houses.	Number of Chowkeedars.	Number of Houses to each Chowkeedar.	HOW APPOINTED.	HOW PAID.
24-Pergunahs.	2,605	1,53,905	2,788	55	Headmen.	Annually cash, from 8 to 220 rupees 11 annas, also in kind.
Nuddea, ...	3,054	2,13,576	4,134	52	Ditto.	Ditto cash, from 1 rupee 8 annas to 60 rupees; grain added in some parts.
Jessore, ...	4,126	2,16,256	4,189	52	Ditto.	Ditto cash, 1 rupee 8 annas to 48 rupees, and ditto ditto.
Moetschedabad	3,014	1,89,871	4,467	43	Zemindars or villagers, or both.	Ditto cash, from 1 to 48 rupees each, and must have some land or grain added.
Baraset, ...	1,981	96,901	2,157	45	Headmen.	Ditto cash, from 11 rupees to 60 rupees each.
Total, ...	14,780	8,70,509	17,735	—		
Grand Total.	1,52,309	6,28,686	1,64,877	—		

Division.

NUDDEA.

Usually then, particularly in Bengal Proper, the Chowkeedar is appointed by the Zemindar. The average receipts of each man will be understated at Rs. 2 per month, and one rupee for presents. That is we have "a total for the annual receipts of 59,85,572 rupees; and calculating at five for each house in these returns, the population would be 3,41,44,330, upon whom the above amount of taxation would fall at the rate of 2½ pie per head per annum, which is certainly a very light taxation, even at the high rate of receipts above assumed."

It is however necessary to enable the Magistrate to fill up a vacancy in the office of a Chowkeedar or to compel payment of his wages. "It has been objected by some very competent advisers on such subjects, that even when all this shall have been done, we shall be as far as ever from our object; that the village Chowkedars, at the best, are an untrustworthy, unorganised rabble, and that no real improvement will be effected unless we get rid of them altogether, and organise a rural police according to the newest forms of occidental civilisation. And it is common with those who advocate this method of reform to point to the 34,000,000 or 36,000,000 of the population, and to urge how easily a sum might be raised from them, not greater than they now pay for their imperfect village watchmen which, in the hands of a skilful organiser, might be made to provide for the establishment in each zillah of a well-paid, dressed, and disciplined force, inferior in numbers to the present rural police, but far superior in trustworthiness and efficiency." Some such plan may one day be carried out, but at present it is impracticable. The pay of the Police must also be increased, some 10 or 15 Darogahs being rewarded by places of Rs. 150 each, and ten more with Rs. 200 each. The salaries of the lower grades must also be increased a measure which according to a plan previously submitted will cost Rs. 3,38,609 a year.

The inexperience of Magistrates can best be corrected by the union of the Collectorate and Magistracy, but all improvement is vain unless we can increase the number of the Magistrates. Their paucity is admitted. The proper extent of a Deputy Magistracy is about three thannahs. There are in practice 400 thannahs in Bengal requiring 133 Deputy Magistrates. There are already 33; so that 100 more are required who on a proper scale of remuneration would cost Rs. 4,60,801, or with establishment six lakhs. Even then, with the necessary increase of pay to the Police costing Rs. 3,38,609, the Police charges of Bengal would be little more than those of the North West.

Further says the Lieutenant Governor:—"I am very sure that our mofussil administration will, *ceteris paribus*, be generally efficient, while it is certain to be also acceptable to the

people according to the degree in which it conforms to the simple or Oriental, in preference to the complex or European model. The European idea of Provincial Government is by a minute division of functions and offices, and this is the system which we have introduced into our older territories. The Oriental idea is to unite all powers into one centre. The European may be able to comprehend and appreciate how and why he should go to one functionary for justice of one kind and to another for justice of another kind. The Asiatic is confused and aggrieved by hearing that this tribunal can only redress a particular sort of injury, but that, if his complaint be of another nature, he must go to another authority, and to a third or a fourth kind of judicature, if his case be, in a manner incomprehensible to himself, distinguishable into some other kinds of wrong or injury. He is unable to understand why there should be more than one hakim, and why the hakim to whom he goes, according to his own expression, as to a father for justice, should be incapable of rendering him justice, whatever be the nature of his grievance, or whatever be the position of his adversary." To this principle he would steadily adhere in all arrangements. As to arranging that the Deputy Magistrate should commit cases to the Moonsiff, who should be invested with criminal judicial powers, it is impracticable. There is antagonism often enough between the Judge and the Magistrate "conceive this local antagonism not merely at each zillah station, but all over every district, and the antagonism in each case, not of two liberally-educated Englishmen, but of two half-educated and Orientally-civilised natives, and let those who know the country and people declare what would be the practical result. Conceive every Darogah opposed perhaps to an antagonist local Moonsiff, and every native Deputy Magistrate to a native Sudder Ameen at an out-station ; imagine the bickerings, the criminations and recriminations that would ensue. For, though under the greatest provocation, corruption is the last thing which a native ever imputes to an English Judge or Magistrate, it is the first imputation which a native casts on a native, on great provocation, slight provocation, or no provocation at all."

The Lieutenant Governor approves the suggestions of the Law Commission, but would extend trial by Jury to all heinous cases in the interior, would diminish the practice of appeal, and enable the Appellate Court to enhance sentences, and would reduce generally the right of criminal appeal. His Honour considers some other doubtful recommendations of the Law Commission, notices the important bearing of roads on criminal justice, and recommends the institution of a Civil Order of

Merit. Finally the Lieutenant Governor notices a plan for the creation of honorary Magistrates, a plan which has much to recommend it, but to which he is not fully prepared to give his adhesion. Notes by the Secretaries are added, but they contain only the details, the results from which have already been given.

On 18th February, 1857 the Right Hon'ble the Governor General recapitulates the correspondence, and with reference to a general Police Reform for all India observes :—" We shall, therefore, in my opinion, be far more likely to arrive at a sound practical result, and to provide effectually for the protection of life and property throughout India, if we treat each Presidency and Lieutenant-Governorship separately, according to its own wants, of course bearing in mind certain leading principles which must necessarily be common to all, than if we postpone consideration of the Bengal question until replies are received from the other Presidencies, and endeavour to frame one scheme which, with minor modifications, shall be equally applicable to all." His Lordship is decidedly of opinion that the appointment of a single Superintendent of Police is inexpedient, and observes as to a semi Military Police " the nucleus of a semi-military force, sufficient for the occasional support of the ordinary police, as well as for other duties, already exists in the Patna Station Guards, the Bhagulpore Hill Rangers, and the corps which has recently been raised for police service in the Sontal Pergunnahs. The Patna Guards have been organised on their present footing since 1848. They supply personal guards to the Commissioner of the division and the Judges of the districts. They also furnish jail, treasury, and opium guards for these districts, and escort for treasure and prisoners." If the Bhagulpore Hill Rangers were burned into a purely Military Corps, and two more police corps organized the existing force is sufficient for Bengal. The scheme proposed by the Lieutenant Governor of Bengal for increasing the salaries of the Civil Police should at once be sanctioned, as also the creation of ten prize appointments of Rs. 150 a month, and 10 more of Rs. 200 a month for specially qualified Darogahs. His Lordship also believes the appointment of additional Deputy Magistrates as to raise the total number to 200 absolutely necessary. He would divide them thus :—

" First Class, ..	10 at 700, ..	Rs. 7,000
Second Class, ..	15 at 600, ..	9,000
Third Class, ..	25 at 500, ..	12,500
Fourth Class, ..	40 at 400, ..	16,000
Fifth Class, ..	50 at 300, ..	15,000
Sixth Class, ..	60 at 200, ..	12,000
Total, 200		71,500
		12

Rs. 8,58,000"

His Lordship is of opinion that reason no less than experience points to the expediency of uniting the executive offices of a district, and therefore approves the reunion of the Collectorate and Magistracy. "I do not think that the case would be met by raising the salaries of the Magistrates and reducing those of the Collectors, or by putting them upon an equality. An inexperienced Collector may be as mischievous as an inexperienced Magistrate, and it is not desirable that any man should exercise independent authority of any kind over a whole district until he is ripe for it. And even if experience could be secured in both offices, the division of authority is to be avoided rather than sought. As regards the people, I fully believe that what has been called the patriarchal form of Government is, in their present condition, most congenial to them; and best understood by them: and as regards the governing power, the concentration of all responsibility upon one officer cannot fail to keep his attention alive, and to stimulate his energy in every department to the utmost, whilst it will preclude the growth of those obstructions to good Government which are apt to spring up where two co-ordinate officers divide the authority." The Joint Magistrate in each district should however, be charged with the immediate control of the Police. "I incline strongly to the opinion that the proceedings of the subordinate criminal court should be of the simplest possible description. I am also of opinion that there should be no appeal of right from the sentence of a subordinate court in criminal matters; but that the Magistrate should have authority to revise or modify the decision of every Assistant or officer exercising the powers of Assistant within his jurisdiction, and that the Judge should in like manner, have authority to revise or modify the decision of every Magistrate or officer exercising the powers of a Magistrate. The review would take place as a matter of course, and any person would be competent to call the attention of the Magistrate or Judge to any point upon which the decision had

done wrong to any one." His Lordship is in favour of the creation of an honorary Magistracy and "should be disposed to authorise the Lieutenant-Governor to vest with the powers of an Assistant Magistrate, under Act No. XV. of 1843, scarcely equivalent to those of a Justice of the Peace under the English law, any persons of respectability whom he may consider fit to be entrusted with such power." The Hon'ble J. A. Dorin, and the Hon'ble Genl. Low, on 21st and 23rd February generally concur.

On 9th April, 1857, the Honourable J. P. Grant concurs generally but observes:—"I feel doubtful whether two additional police corps, as proposed, would quite suffice to protect Bengal as it should be protected, considering the remarkably small number of regular troops which are now or hereafter are likely to be cantoned within its limits. I fear one corps at Dacca will be an insufficient provision for Eastern Bengal. The Sontal side of Bengal is now amply provided for. There is no reason to suppose that because the last outbreak was there, the next will be there also. I look upon the Sontal Pergunnahs as quieted for ever; but I regard the Ferazy population of Eastern Bengal, filling extensive and populous districts now wholly unprotected, as a source of very serious danger, though a danger which requires only the securities provided in every part of India except Bengal, in order to be fully guarded against." Mr. Grant would rely wholly on the semi-Military Police for the work now performed by Burkundazes. He considers the expense to be incurred for new Deputy Magistrates too great, and would in preference grant criminal powers to civil subordinate Judges. Mr. Grant considers that the result of the Torture Commission strengthens the case against the union of the Collectorate and Magistracy. As to the general question of the union of all executive powers in one hand. "One has only to read a native or English newspaper with a mofussil circulation, to see that those for whom such mental food is provided have no filial regard for Government officers. They are past the patriarchal epoch. What they ask for are good laws, well administered by as many functionaries as the country can fairly claim with reference to its general circumstances, and the taxes it pays. These classes want nothing from Government more paternal than this; less than this they will not accept, and all this they have a right to have. My mature conviction is, that they never can have this, unless incongruous functions are kept in separate hands, and every functionary is required to mind his own proper business." As to the example of the Punjab. "The Punjab has been fortunate in the selection of its work-

men ; but its peculiar good fortune has consisted in this, that its workmen have not been required to make bricks without straw.

For 19 districts of moderate size, containing a population of something upwards of 10,000,000, 7 police battalions of foot, and 27 troops of mounted police, have been provided, at a cost of about 16½ lakhs of rupees a year. Altogether, for the civil duties of this territory, 8½ battalions and 38 troops, consisting of 12,000 men in organised bodies, are set apart. Besides these, for the same territory, there are about 10,000 men called detective policemen, maintained at a cost of about 8½ lakhs of rupees a year, and all this is besides the old village Chowkeedars, or watchmen of the country. Knowing this, I was prepared to hear that the extinction of dacoity, and of all crimes of organised violence, in the central districts of the Punjab, may be pronounced complete." On 30th April, 1857, the Honorable B. Peacock records his general assent, but would deprive the Deputy Magistrates of all judicial powers leaving them to the Moonsiffs.

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THE
ANNALS
OF
INDIAN ADMINISTRATION.



EDITED BY
MEREDITH TOWNSEND.

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THE Governments of India publish on an average a volume every four days. From Reports affecting the entire Empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha bye-road in a frontier province, every thing finds a place in these publications. There is scarcely a subject connected with Indian Administration on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is however, widely scattered. The Records of one Presidency are scarcely known in another. The books are not very readily procurable, and above all they are like all other Blue Books dry, ill-digested, and overlaid with detail. It costs an hour to find a fact and in India men who care about facts cannot spare hours.

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THE
ANNALS
OF
INDIAN ADMINISTRATION.

THE MUTINIES.

Parliamentary Blue Books.

ON 8th August the Governor General in Council continues the narrative :—

Agra.—On June 24th, the Europeans in Agra were organized into a militia, and on 5th July, 500 of the 3rd Bengal Fusiliers marched out to attack the Neemuch mutineers. Two tumbrils blew up, and they were compelled to retire from want of ammunition. The troops and the Europeans were all concentrated in the fort.

Allahabad.—Country tranquil and supplies in course of collection. An extensive entrenchment is being made.

Azimghur.—On 18th July, the garrison attacked the enemy. The sowars refused to charge and the 65th Native Infantry fired in the air. The loss of the town was prevented by Mr. Venables, who served a gun himself. At a Council of War held in the afternoon, Mr. Venables, Mr. Simpson, and Lieutenant Havelock voted that the place was tenable. Their counsel prevailed, and on 19th, the city was cleared. On 29th July, hearing of the approach of 200 sowars of Holmes' Regiment (12th Irregular Cavalry) the officials retired on Ghazeepore. The sowars of that Regiment in Ghazeepore deserted, 500 Goorkhas were ordered thither.

Barrackpore.—There was considerable panic in Calcutta during the Bukker Eed, but it passed off quietly. The arms of the body-guard were placed in the arsenal. Two Regiments of Madras Native Infantry had reached Calcutta. The Sikhs had been collected from all the Regiments below Raneegunge and formed into a corps.

Benares.—A fort is to be erected at Raj Ghat with guns sent

down from Allahabad and Chunar. The Irregular Cavalry of the 13th were disarmed on 6th instant.

Berhampore.—The 63d Native Infantry, and 400 men of 11th Irregular Cavalry were disarmed on 2nd August. The horses of the Irregulars were taken away. The Nuwab's troops and towns people were also disarmed.

Bhaugulpore.—Orders were sent to disarm 5th Irregular Cavalry, but the Commissioner represented that the order would risk the lives of all Europeans in the interior of the district.

Cawnpore was re-occupied on the 17th July. Bithoor was occupied on 19th July without resistance. Nana Saheb's followers fled. His palace was burnt and 13 guns taken. By July 23rd, two-thirds of General Havelock's force had crossed the river into Oude. On 25th July, Sir Patrick Grant recorded his opinion that General Havelock should pass into Oude, and not as had been proposed, reinforce the army before Delhi. Agra so well supplied could not fall, and reinforcements were on their way to Delhi, while to abandon Oude would be to enable the mutineers to seize all the country between Goruckpore and Purneah. On 24th, General Neill arrived and stopped plundering, created a Police and Intelligence Department, and began collecting troop horses. General Havelock's force marched off on 29th July, dispersed a strong post of the enemy, and took 3 guns. An hour after the enemy advanced in force, but were routed with the loss of fifteen guns. The enemy numbered 13,000 men.

On 31st July, General Havelock arrived at Mungulwar with a force reduced by sickness, and repeated combats to 1364 rank and file, and 10 guns. He had therefore fallen back two marches.

Chunar.—Fifty European Infantry and 20 Invalid Artillery had been ordered there. The place on their arrival would be safe.

Delhi.—The force there amounting to about 6,000 men of all kinds was attacked every two or three days. The enemy were invariably repulsed. There were 28 field guns and 12 siege guns with the forces, but not sufficient ammunition for a siege artillery.

Dinapore.—The three native regiments mutinied on 25th July; they went off with their arms. They crossed the Soane, and commenced plundering Arrah where they were joined by Raja Koer Singh of Jugdeespore. A detachment of H. M's. 37th with Enfield rifles were sent up the Soane in a steamer, but she grounded. On 27th, another attempt was made to send the *James Hume* but she also grounded. Two companies of H. M's. 10th, two of H. M's. 37th and 50 Sikhs were then sent in the *Bombay*. They reached the point of debarka-

tion on 29th July, and marched straight on Arrah. Captain Dunbar listening to false reports marched on in the dark, and fell into an ambuscade. 7 officers and 184 men were killed, 3 officers and 63 men were wounded. Captain Dunbar was killed, and the Europeans made a hurried retreat to their boats. Major General Lloyd was removed from his command for culpable neglect. Major Eyre of the Artillery had proceeded from Buxar with 3 guns and 151 of the 5th Fusiliers. He reached Arrah on the 3rd August. This mutiny has made the Arrah road unsafe.

Putteghur.—The 10th Native Infantry mutinied on the arrival of the mutinous regiments from Seetapore. Four companies went off with the treasure. One company guarded the Europeans some of whom had been killed, and "the latest information which has been received represents that there are about 35 men, and 50 women and children, shut up in the fort with provisions but for few days, and threatened with attack by the mutineers encamped in their vicinity. The Nawab Raees is said to have been set up by the mutineers." It is understood that the majority of Europeans escaped down the river, and were murdered by Nana Saheb.

Ghazeepore.—All well.

Goruckpore.—500 Goorkhas had arrived. The two companies of 17th Native Infantry and detachment 12th Irregular Cavalry were disarmed on 1st instant.

Gwalior.—Nothing certain.

Hazareebagh.—The detachment of the 8th Native Infantry mutinied on 30th July. The ladies and children had been sent off on 28th July, and an express sent for a portion of the Ramghur Light Infantry Battalion. Captain Drew in command finding that native letters had arrived announcing the revolt at Patna, ordered the native officers to his quarters to explain of the facts. They came, but it was evident their men could not be relied on. The sepoys immediately rose but the Europeans rode through the jungle to Bagoda, and thence to Raneegunge. Lucknow was still holding out. The Acting Chief Commissioner Major Banks had been killed.

Mhow.—British authority was re-established.

Mooltan.—1st Bombay Fusiliers and 1st Belooch Battalion have arrived.

Moradabad.—Mr. C. B. Saunders supplies details of the revolt at this place. (No date to the letter.) The troops, part of the 29th Native Infantry, and some Irregular Cavalry at first seemed obedient, and assisted to put down anarchy, but on the 2nd June news of the Bareilly massacre arrived, and the sepoys seized all the treasure 75,000 rupees, the opium and the plate chests

deposited. The officers of Irregular Cavalry escorted the Europeans to Meerut, and were promoted. The officers of the 29th were not however with the party. On 30th June, the Lieutenant Governor warmly praised the conduct of the civil officers concerned.

Neemuch.—Further details of the mutiny in this place are supplied by the Superintendent under date June 16. On the morning of 2nd June, the native officers all took an oath on the Koran and the Ganges water to be faithful to each other and their salt. On the 3rd November, the Artillery broke out the Cavalry joined them and then the 72nd. "To provide for this emergency, I had furnished Captain Macdonald with a written promise on the part of Government of rewards to the following amount in case of a successful defence of the fort and treasury, but to be used only in case of an outbreak :—

	Rupees.
To each sepoy,	100
To each naick,	300
To each havildar,	500"

The 7th Gwalior Regiment held firm for a time, but an officer Heera Singh ordered the gates to be opened. Captain Macdonald who remained with his officers to the last thereupon left. The Superintendent hovered about the burning station till daylight in hope of assisting any fugitives and then rode off by the Oodeypore Road.

Oude.—All lost except Lucknow.

Patna.—In a state of excitement.

Rewah.—Kullinger has been recovered by the Maharajah of Punnah. The Maharajah has offered his troops.

Saugor.—31st Native Infantry, still loyal. The European Artillery are still in the fort. Dumoh is held by some men of the 42nd Native Infantry, the remainder having marched for Delhi.

On 23rd August the Governor General and Council continues the narrative :—

Agra.—The Lieutenant Governor on July 28th, applied to the officer commanding at Cawnpore for a force to move up the Doab. The battery in the station could not horse more than two guns. Some supplies and ammunition could be sent to meet the column on the road. There were only means to horse two guns in the fort.

Allahabad.—"All quiet at the station itself. The communication between Allahabad and Cawnpore had been interrupted by the rebels. A party was sent out which dispersed the rebels, and reopened the communication. The number of effective men at Allahabad on the 17th was 492 European Infantry, 54 Euro-

pean Artillery, 30 European invalids, and 152 Seik Infantry. Indications of rebels from Oude crossing over, and again cutting off the communication existing, the steam gun-boat *Jumna* was sent up the Ganges one-third of the way to Calpee, with orders to destroy all boats ; and the steamer at Cawnpore had, in like manner, been sent down to destroy the boats on the river, and to prevent the threatened crossing of the rebels at Futtehpoore. The Tehsildars from the Oude districts were interfering with the villages near the road between Allahabad and Benares. No native troops were available to protect these villagers."

Allyghur.—An Agent of the King of Delhi has arrived to collect revenue.

Arrah.—The Dinapore mutineers reached Arrah on 27th. The post was defended by the Civil residents of the station in the house of Mr. Boyle, Railway Engineer. Major Eyre with 150 of H. M.'s 5th and 3 guns advanced from Buxar, and met the enemy near Beebeegunge. They numbered 2500 besides Koer Singh's irregular forces. The sepoys made determined rushes on the guns, but were driven back by showers of grape. They were then dispersed by a general charge, and fled precipitately. Major Eyre, reinforced by 200 of the 10th Foot and 100 Sikhs left Arrah on 11th August. On 13th August, he reached Jugdispoore, the residence of Koer Singh. The sepoys were driven out of the jungle in front of the house, and Koer Singh fled precipitately. The house was found full of grain ammunition and other of warlike stores. The palace, the town and a new Hindoo temple belonging to Koer Singh were destroyed. Three hundred of the enemy were killed in defence of Jugdispoore.

Bareilly.—The district is understood to be deserted, the mutineers having gone to Delhi.

Benares.—The Commissioner of the Patna Division has ordered in all Civil authorities.

Bhaugulpore.—The 6th Irregular Cavalry deserted on 14th August taking the direction of Rohnee. The 32nd there stationed fired on them. The number who fled was 220. Nineteen men remained faithful. On the 18th August, they left for Gya.

Cawnpore.—On 27th July, Brigadier General Neill transmits certain proclamations found at Cawnpore, and signed by Nana Saheb. The first orders Boondoo Singh, Subadar of the 17th Native Infantry to murder all the English permitted to retire from Cawnpore as soon as they reach the other side of the river. The second was as follows :—" A traveller who came to Cawnpore from Calcutta, had heard that first the Council met for the

purpose of distributing cartridges to take away the religion of the Hindustanis. The intention of the Council was this, that when the religious business comes on 7,000 or 8,000 Europeans will kill about 50,000 Hindustanis; then all will become Christians. The sense of this proposal was sent to Queen Victoria, and she having approved of it several Councils were held, which were joined by the European merchants. This determination was come to, that so many European soldiers should be asked for, that no matter how many Hindustanis there were in the day of battle, they should be defeated. When this request was known in England, 35,000 soldiers set out in ships for Hindostan; and when the news of their departure reached Calcutta, orders were then issued to serve out the cartridges, with the fixed purpose of making the army Christians; and then the christianizing of the ryots would be quickly accomplished. The cartridges were smeared with the fat of pigs and bullocks, the news of which was received from the Bengalees employed in making them. For saying this one of these men was put to death, and all the others put in prison. While they were doing this the Vakeel of the Sultan sent him news from London that 35,000 soldiers had set out for Hindostan to christianize the people there. The Sultan ordered the King of Egypt thus: 'This is no time for peace; do you deceive Queen Victoria, because my Vakcel has written that 35,000 men, for the purpose of christianizing the army and people of Hindostan, have set out for that country. Now the remedy for this is difficult for me; but if I neglect this how shall I show my face before God? and some day the like will happen to myself, for if the English christianize India they will do the same to my country also.' On receipt of this order the King of Egypt, before the assembly and arrangement of the European force, sent his own army to Alexandria, which is on the road to India. Immediately on the arrival of the European army, that of the King of Egypt began to fire on them from all sides with guns, and having destroyed the ships, sunk them, and not one European escaped. The English in Calcutta, after having issued the order for biting the cartridges, and exciting this rebellion, were awaiting reinforcements from London, for the great God, from his complete omnipotence, is first, and his decrees are accomplished. When the news of the destruction of the London army arrived, the Governor-General was much afflicted and grieved, and he lamented. 'In the night, murder and robbery; in the morning, neither head upon the body nor crown upon the head. The blue sky makes one revolution; neither Nadir nor a trace of him remains'." The third organizes the mutinous army on the Irregular plan one Colonel Commandant, one Major and one Adjutant. Each Subadar is to

have a company. In the Adjutant's office one Meer Moonshee and two Mohurris are allowed. The fifth proclamation fixes the rates of pay. "In the Artillery, Infantry, and Cavalry, there shall be four commanding officers. The pay of a Colonel shall be 500 rupees, and his allowance 250 rupees; the Major's pay shall be 500 rupees; and the Adjutant's allowance, in addition to his pay as a Subadar, shall be 150 rupees. The Quartermaster also shall have 150 rupees, in addition to his pay as a Subadar, both of whose duties he is to do." The fourth grants pensions for wounds and old age, but the amount is not fixed. On July 29th, Brigadier General Havelock describes the victory of Oonao. He moved from Mungulwar on 20th July, and found the enemy encamped with a town on his left, a swamp on his right, and a loop-holed village and garden enclosure in front. The bastioned enclosure was carried, the village was set on fire, and the infantry and horse were dispersed. General Havelock then advanced, and captured the fortified town of Busherutunge. Nineteen guns were taken from the enemy. 12 were killed and 76 wounded on the British side. On 4th August, the General was joined by the half of Major Olphert's battery, the gun lascars of which were immediately disarmed, and sent to Cawnpore to work in the trenches under penalty of death. On 5th August, General Havelock stationed at Mungulwar heard that the enemy had re-occupied Busherutunge. He accordingly drove them out of it, capturing two guns, and killing 300 men. He feared (Despatch of August 6th) that he would be unable to relieve Lucknow. On 11th August, the General fought his eighth combat since 12th July. The enemy 4,000 strong with some guns had again occupied Busherutunge. The enemy were beaten out of a strong position with the loss of 200 men. The British loss was only 35. On 13th August, the whole force recrossed the Ganges. On the 15th August, General Havelock reports that of 1,415 troops, 335 are sick and wounded.

On 16th August, he again defeated the enemy at Bithoor killing 100 men.

On 19th August, the total of non-effectives amounted to 17 officers, and 466 men. On the same day, General Havelock reported that the Oude men were moving down the left bank to attack Cawnpore, and that the Gwalior Contingent with a siege train was at Culpee intending an attack. On 20th August, he again demands reinforcements. On 21st, he states that unless reinforced he must fall back on Allahabad. On 23rd, news of promised re-inforcements reached Cawnpore.

Delhi.—Various details of engagements are supplied. On the 14th, the mutineers moved out of the city and attacked the

batteries at Hindoo Rao's House. The force amounted to 20 Regiments of Infantry, a large body of Cavalry, and some field pieces. The troops maintained their position for about seven hours and finally drove the enemy out of the suburbs. The force at this time consisted of 7092 rank and file. "On these last three occasions the loss of the enemy is said, by their own account, to have amounted to 3,000. Our loss was trifling, about 30 only. The mutineers were very dispirited by the failure of their attacks, and were applying for leave to go to their homes. Accounts from Delhi of the 8th mention that the powder manufactory in Begum Sumroo's house, Delhi, had been blown up by our shells: 500 are said to have been killed, and a very large quantity of sulphur and saltpetre completely destroyed. No serious fighting had taken place between the 2nd and 8th. The Hindoos had killed five butchers for having slaughtered cows: no retaliation had been attempted by the Mussulmans. The Kumaon Battalion (Goorkah) with a large convoy of treasure, arms, and stores, had joined on the 1st. The Punjaub moveable column, consisting of Her Majesty's 52nd, a wing of the 61st, and some Punjaub troops, was expected on the 15th. Major-General Wilson intends firmly to hold his ground. Our position is very strong."

Dinapore.—On the 16th some men of the 10th Foot attacked some of the sepoys of the 40th who had remained faithful, and five sepoys were killed.

Futteghur.—It is certain that this place has fallen and that the fugitives were murdered on 13th July by Nana Saheb.

Fyzabad.—On 15th July, Col. Lennox submits a narrative of the mutiny at that station and his own escape:—"On the evening of the 8th June, intimation having been received that the 17th Regiment Native Infantry were to march into Fyzabad on the following morning every officer was at his post, myself at the quarter-guard, the troops by their arms. Two companies were told off for the support of the 13th Light Field Battery. Every precaution taken for defensive operations. At 10 p. m. an alarm was sounded in the 6th Oude Irregular Infantry lines, and taken up by the 22nd Regiment Native Infantry. The battery prepared for action, and the two companies in support of the guns immediately closed in and crossed bayonets over the vents, preventing the officers of Artillery from approaching the battery. This was reported to me by Major Mill, commanding the Artillery. I then went to the guns, and explained to my men that the bugle sound was a false alarm, and ordered them to return to their respective posts, and leave only one sentry over each gun. I then returned to the lines of the 22nd Regiment, with a view of dismissing the regiment. I found the light company had

surrounded the regimental magazine, with a view, as they said of protecting it. It appears this was a concerted scheme, for the troop of 15th Irregular Cavalry sallied out and instantly planted patrols all round the lines. I again visited the guns, and was refused admittance; the Subadar, (the prime leader of the mutiny) Duldeep Singh telling me it was necessary to guard the guns, and requesting me to go to the quarter-guard and take my rest, and that nothing should happen to myself and officers so long as we remained with the regiment. A guard with fixed bayonets surrounded me, and escorted me to my charpoy in the quarter-guard; the officers also of the regiment were not allowed to move twelve paces without a guard following them." On 9th July, the officers descended the river in boats, Colonel Lennox and his family alone being detained. At 2 p. m. he also started, but near Adjoodhea he quitted the boat and tried to march to Goruckpore. He was seized by an armed horseman, but protected by some followers of a neighbouring zemindar, Meer Mahommed Hoossein Khan, who guarded him for some days and then sent him to Goruckpore. Farrier Sergeant Busher, on 29th June, relates the fate of part of the officers who escaped. The first two boats were compelled about twenty-one miles from Adjoodhea to land, to escape a body of armed men watching for them. Seven of the 8 in the boat then ran across country. Six however were one after another killed by the villagers. Sergeant Busher himself was at last caught, and exhibited from village to village, but his captor was warned by a brother to beware of retribution, and subsequently he treated the Sergeant kindly, and gave him up to a party sent from Captain Gungce. Thence he arrived in safety at Ghazeepore.

Ghazeepore.—The 65th Native Infantry were disarmed on 10th August.

Goruckpore.—It was abandoned on the 13th except by Mr. Bird.

Hansi and Hissar.—This district is being settled by General Van Cortlandt.

Hazareebaugh.—The 2 companies of the Ramghur battalion sent to Hazareebaugh mutinied, and on 1st August, took the road to Ranchee expressing hostility to all Europeans. All officers at Ranchee went into Hazareebaugh. The troopers remained firm and marched on to Hazareebaugh. The Ramghur Rajah lent fifty men to help to restore order. The detachments of the Ramghur battalion at Purulia and Chyebassa also mutinied.

Gya was abandoned under orders of the Commissioner. Mr. Money, the Collector and Mr. Hollings however returned and with a party of H. M.'s 64th saved the treasure, and after beating off some Nujeebs on the Grand Trunk Road sent it

safely to Calcutta. The Gya officials reoccupied the station with some Sikhs.

Lahore.—The disarmed 26th Native Infantry mutinied and killed Major Spencer. They were attacked and 30 killed, but the remainder moved off.

Lucknow.—The garrison was holding out on 16th.

Mhow.—On 9th July, Major C. Cooper of the 23rd Native Infantry reports in detail the mutiny of that Regiment. On 1st July, Colonel Platt received information that Colonel Durand had been compelled to fly by revolted sepoys in the service of Holkar. The mutiny broke out at 10 p. m. the sepoys firing on the officers. The latter retreated to the fort whence Colonel Platt and his Adjutant rode down to the lines. They were killed while Colonel Platt was haranguing the men. Two guns under Captain Hungerford soon drove the men out of the lines, and they went off to Indore. Two sepoys saved Lieutenant Simpson, but though promised promotion they joined their comrades.

Saugor.—The 31st Native Infantry have been employed against the Boondelas. They behave remarkably well. "The communication between Raneegunge and Benares was stopped from the 2nd of August to the 16th, in consequence of the officials having been obliged to quit their posts at Bagoda and Shergotty, and from the mutineers from Dinapore having come on the Trunk Road at Sasseram and destroyed the electric telegraph, post office, and removed the dak horses."

Agra.—There was great want of money in the fort up to 27th August, some was raised by supplying bills.

Allahabad.—A plot was discovered here to surprise the fort and release the State Prisoners Hyrt Khan, Man Singh, Lall Singh, and Prema. It was accidentally discovered and the ring-leaders hanged. The Government was of opinion that the prisoners were not concerned in the mutiny.

Barrackpore.—The 70th Native Infantry have volunteered for China.

Cawnpore.—On 1st July the following proclamation was issued by Nana Saheb:—"As by the bounty of the glorious almighty God, and the enemy destroying fortune of the Emperor the yellow faced and narrow minded people have been sent to Hell, and Cawnpore has been conquered, it is necessary that all the subjects and landholders should be as obedient to the present Government as they have been to the former one; that all Government servants should promptly and cheerfully engage their whole mind in executing the orders of Government; that it is the incumbent duty of all the ryots and landed proprietors of every district and pergunnah, to rejoice in the thought that Christians have been sent to Hell, and both the Hindoo and Mahomedan religions

have been confirmed ; and that they should, as usual, be obedient to the authorities of the pergunnahs, and never to suffer any complaint against themselves to reach the ears of higher authorities." Reinforcements of 1268 men, the 90th, 5th Fusiliers, and 66 Artillerymen were ordered to join General Havelock. All disposable force in Allahabad was also ordered up. On August 29, Mr. Shepherd of the Commissariat Department furnishes some details of the original outbreak. The Cawnpore residents were under the idea that the regiments would march at once for Delhi. An entrenched camp was prepared and supplies placed in it. The Nana of Bithoor undertook to protect the treasury. The Christian residents removed into the neighbourhood of the entrenchment on 1st June. On 5th June, the 2nd Cavalry rode off followed by the 1st Native Infantry. The latter saved their officers, sending them into the entrenchment. In the evening the 2 remaining Regiments, the 53rd and 56th also went off. The native commissioned officers did not join the sepoys but went away to their homes. At Nuwabgunge the mutineers were received by the Nana Saheb. They were joined late in the evening by the Golundaze of the 3rd Oude Horse battery who strongly urged an attack on the entrenchment. Nana Saheb consented, and six guns having been got ready commenced firing on the entrenchment. The fire was returned. There were in the entrenchment :—

1st company, 6th battalion Artillery,	...	...	61
Her Majesty's 32nd Regiment,	...	...	84
1st European Fusiliers,	..	...	15
Her Majesty's 84th Foot,	...	..	50
			— 210

Officers of the three Native Infantry, Cavalry, and			
others, with the staff,	...	..	100
Merchants, writers, and others, about,	..	...	100
Drummers, about	..	...	40
			— 140

Women and children of soldiers, about	...	..	160
Ditto of writers, merchants, and drummers,		..	120
Ladies and children of officers,	..	...	50
			— 330

Servants, cooks, and others, after a great number had			
absconded, on hearing the enemy's guns firing,	...		100
Sick sepoys and native officers who remained with us,			20
			— 120

Total, 900
For three days the enemy's fire was incessant, but after that they

used to stop for two hours at about candle light. The mutineers never, however, dared attack. The enemy commenced firing live shells, and on 13th June, the barrack in the centre of the entrenchment took fire, and in spite of every exertion the helpless wounded and sick were burnt to death. The enemy several times attempted an assault, but were always beaten, and latterly directed their fire on the guns. Two only out of the eight remained sound. A very heavy attack was made on 21st June, defeated chiefly by the gallantry of Captain Moore. The writer was taken prisoner while endeavouring to obtain information in the city, but observes that it was possible by a bold charge to have seized the guns. The garrison however were not aware that they were left almost unwatched. On 24th June, Mrs. Greenway, a very old lady captured by the Nana but spared on promise of a lakh of rupees, was sent to open communications. The mutineers offered to let the English depart safe if all the guns and treasure were surrendered. This was accepted, and at 8 o'clock A. M. the force embarked in boats provided by the Nana. The men were then fired on and shot down, and the women and children carried to a brick building in the Nana's camp. There they remained in terrible misery. The force of the Nana amounted to 20,000 men, and the city was given up to plunder. After the battle of Futtehpoore some rebels reported that letters had been received from the camp, and it was resolved to put all who knew English to death. "The native spies were first put to the sword, and after them the gentlemen, who were brought out from the outbuildings in which confined, and shot with bullets; thereafter the poor females were ordered to come out, but neither threats nor persuasions could induce them to do so. They laid hold of each other by dozens, and clung so close that it was impossible to separate or drag them out of the building. The troopers therefore brought muskets, and after firing a great many shots from the doors, windows, &c. rushed in with swords and bayonets. Some of the helpless creatures in their agony fell down at the feet of their murderers, clasped their legs, and begged in the most pitiful manner to spare their lives, but to no purpose. The fearful deed was done most deliberately and completely in the midst of the most dreadful shrieks and cries of the victims. There were between 140 and 150 souls, including children; and from a little before sunset till candle-light was occupied in completing the dreadful deed. The doors of the buildings were then locked for the night; and the murderers went to their homes. Next morning it was found, on opening the doors, that some 10 or 15 females, with a few of the children, had managed to escape from death by falling and hiding under the murdered bodies of their fellow prisoners. Fresh order was

therefore sent to murder these also ; but the survivors not being able to bear the idea of being cut down, rushed out into the compound, and seeing a well there threw themselves into it without hesitation, thus put a period to lives which it was impossible for them to save. The dead bodies of those murdered on the preceding evening were then ordered to be thrown into the same well, and julluds were employed to drag them away like dogs." Thus was on the 16th July. On 17th July the English troops entered Cawnpore.

Delhi.—Brigadier Nicholson arrived on 14th August with II. M.'s 52nd, a wing of H. M.'s 61st and 200 horsemen. On July 30th, Brigadier General Wilson wrote to Mr. Colvin :—" It is my firm determination to hold my present position and to resist any attack to the last. The enemy are very numerous, and may possibly break through our entrenchments and overwhelm us, but the force will die at their post. Luckily the enemy have no head and no method, and we hear dissensions are breaking out among them. Reinforcements are coming up under Nicholson. If we can hold on till they arrive, we shall be secure. I am making every possible arrangement to secure the safe defence of our position." On 26th August, Brigadier Nicholson defeated the enemy who had attacked the British rear, and took 12 field pieces. On 31st August, the force before Delhi is estimated at "seven companies of Her Majesty's 8th Foot and the 52nd, 60th and 61st Regiments; also the 1st and 2nd Bengal Fusiliers, the 9th Lancers and a squadron of Her Majesty's 6th Carabiniers. The native Regiments are the Sirmoor and Kumaon Battalion, the 1st and 2nd Punjaub Infantry, the 4th Sikh Regiment, the Guide Corps and wing of the 1st and 2nd Punjab Cavalry. There are six troops of Horse Artillery, three reserve companies of Europeans and Sikhs, a third class siege train in camp, and a second class siege train on the road.

"The rebels have twenty-four regiments Regular Infantry, three Regular Cavalry, three regiments of Irregulars, 400 miscellaneous Horse from various regiments and contingents, and an armed rabble of fanatics. They have also thirty Horse Artillery guns, with the Delhi fortress and magazines." An attempt at negotiation had been made.

Ferozepore.—A wing of the 1st Bombay Fusiliers had arrived from Mooltan and Kurrachee.

Goruckpore is occupied by an Oude Chuckladar named Mahommed Hoossein, he is organizing regular establishments.

Jhansee and Nowgong.—The men at Nowgong and at Jhansee had abandoned the question of the cartridge and were ashamed to hear about it. On 4th June, however the 7th company of the wing of the 12th Native Infantry stationed at Jhansee mutini-

ed. The remainder said they would stand by their officers but on the following day killed Captain Dunlop and Ensign Taylor as they were returning from the quarter guard. The remaining officers Civil and Military got into the city fort. There they were attacked on 7th July, and shot down a great number. They had however no provisions and they were obliged to yield; the mutineers solemnly pledging themselves to spare their lives. All men, women and children were massacred, except Quarter-master Serjeant John Newton of the 12th Native Infantry, a very dark half caste. Meanwhile news of this mutiny had been received at Nowgong. At sunset of the 10th, the Sikhs shot down an unpopular Havildar Major, and seized the guns. The officers threatened by the men took the Gurowlee road, fired into with grape as they passed. They escaped however and till 21st June continued their flight to Banda. There the Raja received them kindly and sent them to Nagode. They were however assailed by all the villagers in British territory, and Lieut. Townsend, Major Kirke, the Sergeant Major Lascar, Mrs. Smalley, Dr. Mawe, Lieut. J. H. Barber were murdered or died of sun-stroke and fatigue. The treasure lost amounted to Rs. 1,21,494. There were also "in the magazines at Nowgong and Jhansi, 1,255 pounds of gunpowder for musketry, besides some barrels of coarse powder for cannon, that was in the Jhansi magazine (the quantity is unknown to me); 3,60,000 percussion caps; 1,30,000 balled cartridges; 20,000 blank cartridges; about 10,000 carbine balled cartridges the 6th Light Cavalry left, though muskets were in store beyond the complement of the corps."

Lahore.—The 26th Native Infantry which mutinied after it had been disarmed, and murdered Major Spencer has been almost destroyed.

Lucknow.—On the 16th August, Colonel Inglis in answer to a suggestion that he should cut his way out reported that the enemy had brought up their 18-pounders within 150 yards of the British position. He had only 350 effective Europeans, natives 300, sick and wounded 120, women and children 450. The garrison could hold out till 10th September. They had got some provisions, and spiked some great guns in a sortie. Many of the enemy by 2nd September were leaving for their homes.

Nusseerabad.—The officers of the 15th and 30th Native Infantry escorted by fifty men are marching to Agra.

Patna.—The opium godown has been fortified. Detachments of Sikhs and H. M.'s. 5th are placed in it.

Saugor.—The 31st continue to behave well.

Sihore.—The Bhopal Contingent mutinied on 6th August and raised the Mussulman flag.

On 24th September, the Governor General in Council continues the narrative:—

Agra.—On the 9th September, Mr. Colvin, the Lieutenant Governor died of bowel complaint, and Colonel Hugh Fraser, c. b., was appointed Chief Commissioner of Agra and the neighbouring divisions. The post was threatened by the Gwalior mutineers, but they were unable to cross the Chumbul which had risen.

Allahabad.—A party had crossed into the Dooab between Allahabad and Cawnpore. They numbered 400 men with four guns. They were attacked by a party despatched, from General Outram's columns, and were dispersed. They threw their guns into the river. On 11th September, there were 150 Europeans, 30 Artillery Invalids, 120 Sikhs.

Barrackpore.—H. M's. 23rd Fusiliers has gone into Fort William. H. M's. 53rd have been sent to the Upper Provinces.

Cawnpore.—Sir James Outram with H. M's. 5th and 70th and Eyre's battery arrived on 16th September. The troops crossed on the 19th September. On 17th September Sir James Outram telegraphed to ask whether when Lucknow was taken, he should hold or abandon it. He was in favour of holding it. In reply he was instructed to do whatever was most conducive to the safety of the garrison. He was not however to rely on speedy reinforcements.

Delhi.—The siege train had arrived with a large supply of ammunition. Some details of actions previous are enclosed. On 16th July the rank and file numbered 7169. 536 were sick, and 419 wounded. It was expected that 10 heavy guns would open on 8th, and 36 more on following day. "Disorder in city increasing. Fresh overtures from the Palace—had not been received. King in consternation, and bankrupt. The bankers complaining of the excesses of the soldiery; the latter taunting the King with his inability to pay them. Urgent orders had gone from the King to the Indore and Gwalior mutineers to proceed to Delhi. The health of the troops before Delhi not so good; fever prevalent; Artillery healthiest. Two thousand from the Rhotuck district had sent in petition for pardon: in reference to this, the late Lieutenant Governor, Mr. Colvin had written to Mr. Greathed, that if they had not been guilty of heinous crimes, especially towards Christians, and their secession would be an important step gained towards the pacification of the district a strong recommendation in their favour to the Governor General might be promised them on their laying down their arms."

Ferozepore.—The men of the 10th Light Cavalry attempted to seize the guns on the 19th August, while the men were at

dinner. The artillerymen with the wing of the Bombay Fusiliers drove them off. Some were killed.

Futteghur.—An authentic account of the mutiny at Futtelighur is contained among the enclosures. On 3rd June, information was received of the Bareilly and Shahjehanpore mutinies. On the 4th June therefore as the 10th were known to be mutinous the ladies and children and many of the residents left in boats. Hurdeo Buksh offered protection to Mr. Probyn and any of his friends and about 40 went there. The rest proceeded onwards to Cawnpore. At Dhurrumpore it was reported that the 10th had returned to their duty, and some of Hurdeo Buksh's party returned. On 18th June, the officers were roused by information that the 10th was in open mutiny and had broken open the jail. The arrival of the 41st from Sectapore had caused the outbreak. The colours were laid at the feet of the Nuwab who refused them, but asked for the treasure. The spoys however shared that among themselves. The Poorbeas immediately started for their homes, where they were plundered by the villagers. The remainder were killed by the 41st "because they were not allowed a share in the public money." It was resolved to hold the fort though out of 100 Europeans only 33 were able bodied men. Seven guns were mounted in the fort. For four days the enemy kept up an ineffectual fire making now and then abortive efforts at an escalade. On the 5th day, the enemy took up positions on the neighbouring roof tops which greatly annoyed the garrison, and killed two officers. The besieged tried advancing under a covered way, and then a mine but both failed. Another mine however was run and it was determined to try to escape. The garrison were divided into three parties, the ladies and children placed in three boats and on 4th July, the voyage commenced, one boat proved unmanageable and was abandoned. The remainder one was caught by the mutineers, and the crew unable to escape flung themselves into the water. One or two reached the first boat, but the majority were murdered. The first boat was destroyed when it reached Cawnpore, but one or two of the second escaped hiding themselves in the villages.

Goruckpore still occupied by Mahomed Hoossein.

Hazareebagh.—"A force is marching, via Hazareebagh to reoccupy Dorunda, in Chota Nagpore. The Ramghur mutineers and guns reported to be on the south side of the Soane on 23rd September. The column under Colonel Fisher had arrived at Baroon on that date, and an attempt would be made to capture them."

Mhow.—All quiet but Malwa quite disorganized.

Neemuch.—The Joudpore Legion mutinied at Erinpoora on

22nd August. The party of the same Legion at Mount Aboo mutinied 21st August, but were driven down the hill by some of H. M.'s 81st Foot. The Bheel companies of the Legion remained faithful.

Oude.—Lucknow was becoming weaker and the native troops losing heart. Man Singh was holding aloof. He was promised by the Government of India "that if he gave effective proof of his good will his position should be, at least, as good as it was before the British assumed the Administration in Oude, and that any promises made by Sir H. Lawrence should be redeemed." The provisions would hold out till 1st October. Man Singh said to have declared for the garrison.

Rewah.—The Rajah had left his capital, Koer Singh's men descended the Ghauts moving westward. Lieutenant Osborne was restoring order.

On 8th October, the Governor General in Council continues the narrative :—

Agra.—All quiet.

Allahabad.—"A portion of the Naval Brigade under Captain Peel arrived on the 2nd September. Insurgents from the left bank of the Ganges had crossed over on the line of road, and had occupied a village at Papanow, only five miles from the fort. A moveable column was being organized to punish these people, but the urgent necessity of pushing on every available man to Cawnpore, had delayed the formation of the column. By the last accounts the successes of our troops at Lucknow, had appeared to render the insurgents less confident. The rail is now used for forty miles to Lohunga, to which the one locomotive ready runs daily."

Azimghur.—The Goorkhas under British officers re-established British authority.

Barrackpore.—The 23rd Fusiliers and 93rd Highlanders, 3 companies 82nd Foot, 2 companies Royal Artillery and 1 company Sappers had arrived from China. 500 13th Light Artillery had also come in from the Cape and a company Royal Artillery with 58 horses.

Bareilly.—"Nothing from this place itself : but it is reported that the officer commanding in Kumaon, hearing that a move was intended on Nynee Tal by a force of 3,000 Pathans, desired the ladies and children to retire to Almorah, proceeding himself with all the disposable men of the 66th Goorkhas to Nynee Tal. On the insurgents arriving within thirty miles of the foot of the hill, finding a warm reception prepared for them, they retired to Bareilly, and were not likely to make a second attempt : 500 of the 66th Goorkhas and 6 guns had been left at Nynee Tal for the present."

Bolundshuhur recovered by Colonel Greathed's column of pursuit.

Delhi.—"After six days of open trenches, two excellent and most practicable breaches were formed in the walls of the place, one in the curtain to the right of the Cashmere Bastion, the other to the left of the Water Bastion; the defences of those Bastions, and the parapets giving musketry cover to the enemy commanding the breaches, having also been destroyed by the Artillery.

"The assault was delivered on four points. The first column, J. Nicholson, consisting of Her Majesty's 75th Regiment (300 men), the 1st European Bengal Fusiliers (200 men), and the 2nd Punjaub Infantry (150 men), assaulted the main breach, their advance being admirably covered by the 1st Battalion Her Majesty's 60th Rifles, under Colonel J. Jones. The operation was crowned with brilliant success, the enemy after severe resistance being driven from the Cashmere Bastion, the Main Guard, and its vicinity, in complete rout.

"The second column, under Brigadier Jones, of Her Majesty's 61st Regiment, consisting of Her Majesty's 8th Regiment (250 men), the 2nd European Bengal Fusiliers (250 men), and the 4th Regiment of Sikhs (350 men), similarly covered by the 60th Rifles, advanced on the Water Bastion, carried the breach, and drove the enemy from his guns and position with a determination and spirit which gave me the highest satisfaction.

"The third column, under Colonel Campbell, of Her Majesty's 52nd Light Infantry consisting of 200 of his own regiment, the Kumaon Battalion (250 men), and the 1st Punjaub Infantry (500 men), was directed against the Cashmere gateway. This column was preceded by an explosion party, under Lieutenants Home and Salkeld, of the Engineers, covered by the 60th Rifles. The demolition of the gate having been accomplished, the column forced an entrance, overcoming a strenuous opposition from the enemy's Infantry and heavy Artillery, which had been brought to bear on the position. I cannot express too warmly my admiration of the gallantry of all concerned in this difficult operation.

"The Reserve, under Brigadier Longfield, Her Majesty's 8th Regiment, composed of Her Majesty's 61st Regiment (250 men), the 4th Regiment Rifles (450 men), the Belooch Battalion (300 men), the Jheend Rajah's auxiliaries (300 men) and 200 of Her Majesty's 60th Rifles, who joined after the assault had been made, awaited the result of the attack, and, on the columns entering the place, took possession of the posts I had previously assigned to it. This duty was ultimately performed to my entire satisfaction.

"The firm establishment of the Reserve rendering the assaulting columns free to act in advance, Brigadier General Nicholson, supported by Brigadier Jones, swept the ramparts of the place from the Cashmere to the Cabul Gates, occupying the bastions and defences; capturing the guns, and driving the enemy before him.

"During the advance, Brigadier General Nicholson was, to the grief of myself and the whole army, dangerously wounded.

"Colonel Campbell, with the column under his command advanced successfully from the Cashmere Gate by one of the main streets beyond the 'Chandnee Chouk,' the central and principal street of the city towards the Jumma Musjid, with the intention of occupying that important post. The opposition, however, which he met from the great concentration of the enemy, at the Jumma Musjid and the houses in the neighbourhood, he himself, I regret to state, being wounded, satisfied him that his most prudent course was not to maintain so advanced a position with the comparatively limited force at his disposal, and he accordingly withdrew the head of his column and placed himself in communication with the Reserve, the present position, therefore embraces the Magazine on one side, and the Cabul Gate on the other, with the Moree, Cashmere and Water Bastions, and strong intermediate posts, with secure communication, along the front and to the rear." From this base the city would be gradually carried.

The following table of forces up to 14th August in Delhi is authentic:—

**STATEMENT showing the Number of Troops, and the Places from which they revolted, and arrived at Delhi ;
prepared by Rujub Allie Khan, Meer Moonshee to the Commander-in-Chief, August 14, 1857.**

No.	Cantonment from which the Troops revolted.	Date of arrival at Delhi.	Cavalry.	Foot.	Guns and Baggage.
		1857.			
1	Meerut, ...	May	11 3 Troops, 3rd Regiment Cavalry.	2 Regiments Infantry, the 11th and 20th N. I.	None.
2	Delhi, ...	"	11 None.	3 Regiments Infantry, the 38th, 54th, and 74th N. I.	6 Guns. Horse Light Field-Battery.
3	Hansi, ...	June	14 470 Sowars, 4th Irregular Cavalry.	1 Regiment Infantry, Hurrianah Battalion.	None.
4	Muttra, ...	"	5 200 Sowars, ditto.	1 Company, 44th N. I. ; 1 Company 67th N. I.	None.
5	Lucknow, ...	"	20 At one time 100, and at another 400, Sowars.	At one time 450, and at another 100, Infantry.	None.
6	Nuseerabad, ...	"	19 500 Sowars, Malwa and Gwalior Contingent.	2 Regiments Infantry, the 15th and 30th N. I.	6 Guns, Horse Artillery.
7	Jullundur, ...	"	22 280, 6th Light Cavalry.	3 Regiments Infantry, the 3rd, 36th, and 61st N. I.	1 Gun, Horse Artillery, taken from the Rajah of Nabha.
8	Ferozepore, ...	"	24 None.	300 Foot, without arms, 45th and 57th N. I.	None.
9	Bareilly, ...	July	1 8 Regiments Irregular Cavalry.	4 Regiments Infantry, the 78th, 23th, 29th, and 68th.	6 Guns, Horse Light Field-Battery, and 1 Station Gun.
10	Jhansi, ...	"	6 and 25 14th Irregular Cavalry, arrived on 25th July.	1 Regiment Infantry, the 12th N. I., arrived on 6th July.	3 Guns, Bullock Light Field-Battery.
11	Gwalior, ...	June	2 400 Sowars, Gwalior Contingent.	None.	None.
12	Neemuch, ...	July	31 1 Regiment of Bengal Cavalry.	4 Regts. I., the 72nd N. I., the 5th and 7th Gwalior Contingent, and Kotah Contingent.	9 Guns, Horse Artillery, Kotah and Gwalior Artillery.

STATEMENT showing the Number of Troops, &c.—(Continued.)

Continent from which the Troops revolted.	Date of arrival at Delhi.	Cavalry.	Foot.	Guns and Baggage.
13 Benares, ...	1857. August	6 200 Sowars, 13th Irregulars.	300 Foot, Sick Regiment of Loo-dianah.	None.
14 Allyghur, ...	June	12 None.	1 Regiment Infantry, the 9th N. I.	None.
15 Agra, ...	"	12 None.	2 Regiments Infantry, without arms, the 44th and 67th.	None.
16 Rhotuck, ...	"	14 None.	1 Regiment Infantry, the 60th N. I.	None.
17 Jhuggur, ...	May	8 300 Sowars.	None.	None.
18 New Troops raised by the King,	June	13 400 Sowars.	1,600 Foot.	None.
19 Ghazees, or Mahome-dan fanatics, from Tonk, &c.	August	6 30 Sowars.	1,470 Foot.	None.
20 Omrao Bahadoor Grandson of Dooday Khan of Ka-moonah,	"	7 40 Sowars.	1,000 Foot.	None.
21 Allahabad, ...	June	27 100 Sowars, 13th Irregulars.	None.	None.
<i>Total Cavalry.</i>		<i>Total Infantry.</i>		<i>Total Guns.</i>
Regular Cavalry, ...	1 Regiment and 520 men	Native Infantry, 24 Regiments and	1,350 men	Horse Light Field Battery, ... 27 guns
Irregulars, ...	2 " 2,300 "	Miscellaneous,	3,070 "	Bullock, " " 3 "
Miscellaneous, ...	770 "			
Total,	3 Regiments and 3,590 men	Total,	24 Regiments and 4,420 men.	Total, ... 30 guns

That is 4,000 Cavalry and 12,000 Infantry with about 3,000 raw levies. On 2nd September, before Delhi there were 8,791 men of all arms, and 5,100 more on their way. Of these 3,241 were Europeans, seven regiments mustering less than 500 men a piece. The following is the General Order on the fall of the city :—

“ The Governor General in Council has received, by a telegraphic message, the gratifying announcement that Delhi is entirely in the hands of Major General Wilson’s army.

“ Delhi, the focus of the treason and revolt which for four months harassed Hindostan, and the stronghold in which the mutinous army of Bengal has sought to concentrate its power, has been wrested from the rebels. The King is a prisoner in the palace. The head quarters of Major General Wilson are established in the Dewan Khas. A strong column is in pursuit of the fugitives.

“ Whatever may be the motives and passions by which the mutinous soldiery, and those who are leagued with them, have been instigated to faithlessness, rebellion, and crimes at which the heart sickens, it is certain that they have found encouragement in the delusive belief that India was weakly guarded by England, and that, before the Government could gather its strength against them, their ends would be gained.

“ They are now undeceived.

“ Before a single soldier of the many thousands who are hastening from England to uphold the supremacy of the British power has set foot on these shores, the rebel force, where it was strongest and most united, and where it had the command of unbounded military appliances, has been destroyed or scattered by an army collected within the limits of the North-Western Provinces and the Punjaub alone.

“ The work has been done before the support of those battalions which have been collected in Bengal from the forces of the Queen in China and in Her Majesty’s Eastern Colonies could reach Major General Wilson’s army ; and it is by the courage and endurance of that gallant army alone ; by the skill, sound judgment, and steady resolution of its brave commander ; and by the aid of some native chiefs true to their allegiance that, under the blessing of God, the head of rebellion has been crushed, and the cause of loyalty, humanity, and rightful authority vindicated.

“ The Governor General in Council hopes that the receipt of despatches from Major General Wilson will soon place it in his power to make known the details of the operations against Delhi, and to record, fully and publicly, the thanks and commendation which are due to the officers and men by whose

guidance, courage and exertions those operations have been brought to a successful issue.

"But the Governor General in Council will not postpone, till then, his grateful acknowledgment of the services which have been rendered to the Empire, at this juncture, by the Chief Commissioner of the Punjab.

"To Sir John Lawrence, K. C. B., it is owing that the army before Delhi, long ago cut off from all direct support from the Lower Provinces, has been constantly recruited and strengthened so effectually as to enable its commander not only to hold his position unshaken, but to achieve complete success.

"To Sir John Lawrence's unceasing vigilance, and to his energetic and judicious employment of the trustworthy forces at his own disposal, it is due that Major General Wilson's army has not been harassed or threatened on the side of the Punjab, and that the authority of the Government in the Punjab itself has been sustained and generally respected.

"The Governor General in Council seizes, with pleasure, the earliest opportunity of testifying his high appreciation of these great and timely services."

Gwalior.—Scindiah is said to have raised from 6 to 10,000 men, and so quieted his Contingent.

Hazareebaugh.—Major Inglis defeated the Ramghur mutineers at Chuttra. They were 700 strong with 4 guns. He had 150 of H. M.'s 53rd and 150 Sikh Police. He defeated the enemy and took the guns. H. M.'s 53rd lost thirty-five killed and wounded.

Jubbulpore.—The 52nd Native Infantry mutinied on 18th September. They murdered Lieutenant Macgregor, but did not touch the treasury or the Europeans. Many were subsequently destroyed by the Kamptec Column.

Lahore.—The circumstances which led to the destruction of the 26th Native Infantry are explained. The spoys of this Regiment and of the 16th and 49th Native Infantry and 8th Light Cavalry all at Meean Meer had remained quiet. On the 30th July, however they were prepared for flight. Somebody warned the commanding officer Major Spencer, who rode into the lines, where with the Quarter Master Sergeant, Havildar Major, and Subadar he was murdered. Lieutenant White who was riding past the lines gave information, and the troops turned out but the mutineers had disappeared. This was between 10 and 11 A. M. At 2 P. M. the Judicial Commissioner and Commissioner of Lahore and soon after the Chief Commissioner hastened in, and finding no pursuit in progress rode sent out three strong bodies of police in different directions. On 1st August, it was found that the mutineers had approached Shahpore. The coun-

try rose, the police killed a number, and the Deputy Commissioner of Umritsur, Mr. F. Cooper seized the remainder. They were executed at once. Of the 600 men who escaped 500 were killed.

Lucknow.—On 19th September, General Havelock crossed the Ganges.

The following is the General Order on the relief :—

“The Governor General in Council rejoices to announce that information has been this day received from Major General Sir James Outram, G. C. B., showing that the Residency at Lucknow was in the possession of Brigadier General Havelock’s force on the 25th ultimo, and that the garrison is saved.

“Rarely has a Commander been so fortunate as to relieve, by his success, so many aching hearts, or to reap so rich a reward of gratitude as will deservedly be offered to Brigadier General Havelock and his gallant band, wherever their triumph shall become known.

“The Governor General in Council tenders to Sir James Outram, and to Brigadier General Havelock, his earnest thanks and congratulations upon the joyful result of which a merciful Providence has made them the chief instruments.

“The Governor General in Council forbears to observe further upon information which is necessarily imperfect; but he cannot refrain from expressing the deep regret with which he hears of the death of Brigadier General Neill, of the 1st Madras European Fusiliers, of which it is to be feared that no doubt exists.

“Brigadier General Neill, during his short but active career in Bengal, had won the respect and confidence of the Government of India; he had made himself conspicuous as an intelligent, prompt, self-reliant soldier, ready of resource, and stout of heart; and the Governor General in Council offers to the Government and to the Army of Madras, his sincere condolence upon the loss of one who was an honour to the service of their Presidency.”

Mirzapore.—“A wing of the 17th Madras Native Infantry and two guns have been sent to Mirzapore; and 200 men of the 10th Foot and two guns are also on their way from Dinapore. About 250 men of the 50th Native Infantry, who after the mutiny of that corps, had escorted their officers, had reached Mirzapore.”

Nagode.—The 50th Native Infantry mutinied on 16th September. They released the prisoners and burnt the station. The officers were protected by 150 of the men at Myhere.

On 2nd October, Major General Sir J. Outram reported that it was impossible to quit the city. The sick and wounded

women and children amounting to 1,000. He would therefore strengthen the garrison and retire.

THE MUTINIES.

Parliamentary Blue Books, No. 5.

ON 22nd August, 1857, the Government of India transmit a narrative of the events transpiring in Bengal from the middle of May to 11th July. On 23rd May, the Commissioners were directed to send in special reports on the state of feeling in their districts. During the early part of June considerable excitement existed in Behar consequent on a popular belief that Government intended to interfere with their religion. The Magistrates reported that everything depended on the troops at Dinapore, and that the Mahommedan population was thoroughly discontented. Precautionary measures were therefore adopted. The frontiers of the disaffected districts were guarded, the treasure at Arrah and Chuprah was removed to Patna, and six companies of the Sikh Police battalion were stationed there. A portion of H. M.'s 61th was sent to Gya, and confidence at first shaken was gradually restored.

"On 13th June, a Nujeeb of the Behar Station Guards at Patna was detected in an attempt to tamper with the Sikhs of the police corps, and to excite them to mutiny.

"In consequence of these said Sikhs not being soldiers, in the legal acceptation of the term, the Nujeeb was not amenable to Act XIV. of 1857. The Commissioner and Magistrate of Patna, were, therefore, appointed Special Commissioners for the district of Patna, to try and punish all offences and offenders cited in the Act referred to.

"By them he was tried, convicted, and sentenced to death, and the sentence was executed at once."

On the same day, the Behar station guards gave up a letter from the sepoys at Dinapore urging them to revolt. They received Rs. 200 each. The Commissioner arrested four Wahabee gentlemen of Patna, but did not inform the Government, and subsequently stated that he considered the sect dangerous from its numbers, influence and organization, and therefore restrained its leaders. He was directed to write more fully and frequently.

On 29th of June, the Commissioner Mr. Tayler reported that he had information of treasonable designs on the part of a Jemadar of Police in Tirhoot and Moulavie Kurreem Ali. The

Jemadar was arrested and the Moulavie fled. His property was attacked and Rs. 2,000 offered for his apprehension. On 3rd July, at 8 p. m. evening 200 men broke into the Catholic Mission. Dr. Lyell with nine Sikhs hearing the disturbance entered the compound, and was shot. His body was recovered and the rebels dispersed as the troops arrived. "Thirty of the men concerned in the disturbance were arrested, and tried by the Commissioner and Mr. Lewis. Fourteen of them, including Peer Ali, a Mussulman bookseller, said to be the man who shot Dr. Lyell, were condemned to death, and executed on the same day; the remaining sixteen were sentenced to ten years' imprisonment." Intimation of the outbreak had been sent to the Magistrate but no notice was taken. The Magistrate was therefore removed. Peer Ali the principal in the riot refused to confess anything, but "his correspondence proved him to have been in communication with Mussee-aool-Zuman, of Cawnpore, ever since the annexation of Oude, and showed that a secret conspiracy had existed for some time in Patna, carried on under instructions from the North-West, for some great ulterior purpose." The city remained tranquil up to 11th June, the period embraced in this narrative. The narrative details the conduct of some native chiefs, censures the inattention of the Commissioner of Patna to orders, and proceeds to notice Bhaugulpore. This division remained quiet, as did Rajshahye and Burdwan. In the Nuddea division and especially the Presidency, there had been panics, but these were known to the Government of India. In Dacca and Chittagong all was quiet, and also in Assam, and at Darjeeling, though the Sappers and Miners there stationed were suspected. The Sonthal Pergunnahs were also quiet, but "at Rohnee three troopers of the 5th Irregular Cavalry made a sudden and savage attack upon their officers, while the latter were sitting unarmed before their mess bungalow. The Adjutant, Sir Norman Leslie, was killed, and the Commanding Officer and Surgeon, who beat off the assailants with chairs, were severely wounded." The murderers were discovered, and the Sikh volunteers offered to march anywhere. In Chota Nagpore the soldiers were supposed to be influenced by the troops at Dinapore, but there was no appearance of insubordination. On 19th June, ladies and children were prohibited from proceeding Northwards, and measures were adopted to keep the Grand Trunk Road open.

On 1st September, the Government of India forward another narrative from the Government of Bengal embracing the period between July 12th and August 8th. One of the Patna rebels "stated that a plot had been in existence for some months, and

that men were regularly paid and money distributed to excite the people to fight for religion and the Padishah of Delhi.

"The letters found in Peer Ali's house disclosed an organised Mussulman conspiracy to re-establish Mahomedan supremacy, and to overthrow the British Government. Copies of these letters have already been forwarded to the Government of India." Of the 16 men hanged, some exhibited the feelings of martyrs, others died silently. The Wahabee leaders continued under surveillance, and the city of Patna remained tranquil. Reports were current about Koer Singh, a great ruined zemindar of Behar. He was ordered to Patna, but refused to obey. In Bhagulpore and Rajshahy there were some few arrests, but general tranquillity. In Dacca there was complete tranquillity, though there was some uneasiness as to the Mussulman population of Baraset. Burdwan remained tranquil, and all the Non-Regulation Districts. "On the 17th of July the provisional sanction of the Government of India was communicated, authorizing the improvement of the Civil Police in the Districts of Behar, by changing the designation of Mohurir to that of Naib Darogah; by raising their salaries to rupees 40, 35, and 30 monthly; by raising the salaries of the jemadars to rupees 20, 15, and 10, in the same proportions; and by raising the pay of the burkundazes to rupees 6 and 5 a month in the proportion of one-fourth of the former to three-fourths of the latter.

"The Lieutenant Governor was likewise empowered to reward, for particularly distinguished services Police Darogahs not eligible for promotion to Deputy Magistrates by special salaries of rupees 200 and 150 a month, the number so promoted not to exceed three of each class.

"The appointment of twenty additional members of the subordinate Executive Establishment to be employed as Deputy Magistrates or Deputy Collectors, or in both capacities, in the province of Behar and on the Grand Trunk Road was granted, together with the general re-construction of the service on the footing." Honorary Magistrates were also appointed for Behar.

An inclosure carries the narrative up to 22nd August. On 15th July, the Commissioner of Behar recommended that 200 horsemen should be enrolled at Rs. 20 a month, and some foot police raised from among low caste men. These proposals were sanctioned. Some further details were received of the proceedings in Patna, and especially a request from Mr. Tayler for permission to prosecute Lootf Ali, a banker. The Lieutenant Governor doubtful of Mr. Tayler's judgment refused to give any advice till he had received a record of the previous trial of Lootf Ali for harbouring a mutineer. He had on that occasion been

acquitted, the Judge remarking on the looseness of the evidence, and the effort made by Mr. Tayler to sway his (the Judge's) opinion by private letters.

A third inclosure carries on events to the 25th August.

In this week the 7th, 8th and 40th Native Infantry at Dinapore mutinied, and also the 12th Light Cavalry at Segowlee who murdered their officers. The Dinapore mutineers were joined by Koer Singh, a well known zemindar of Arrah. They plundered that station and the Treasury, and beleaguered the Europeans and 50 Sikhs in a house fortified by Mr. Boyle, of the East India Company. On the 25th July, the Commissioner of Patna received intimation of the mutiny, and on 1st August, he ordered the outstations to be abandoned, and the officers in charge of them to fall back on Patna. On 30th July, Martial Law was declared in the Patna Division, and the functions of the ordinary Criminal Courts were suspended in respect to heinous offences. On 28th July, the Officiating Magistrate of Behar reported that the only real danger was in an attack on Gya by the mutineers and "proposed meeting them with 45 English soldiers, 100 Seikhs, and 40 Nujcebs, either in the neighbourhood of Gya, or of defending the treasure in a pukka house with the above force, if the mutineers were in too great number to be opposed in the open field. The district was said to be disaffected throughout. Many of the sepoy of the 8th Native Infantry belonged to it, and the Magistrate had no doubt that the mutineers would find plenty of sympathisers if disorder once began. He therefore strongly urged the detachment of more European soldiers to so important a place as Gya, if they could possibly be spared." In the remainder of Bengal all continued quiet, but in the Presidency enquiries were made as to the sale of arms, the stocks of arms were seized, and the apprehensions of the Mussulmans who expected attack during their festival were quieted.

The fourth inclosure continues the narrative to August 29th.

In Behar, Mr. Tayler was prohibited from holding trials under Act No. XVII. of 1857, he having disobeyed the order to leave all such cases to the Judge. "On 31st of July, Mr. Tayler submitted a copy of a Minute drawn up by him to show that as Europeans are scattered in small numbers over several districts, with no adequate protection, nothing but murder and disaster could be expected.

"In these circumstances, he considered concentration an imperative necessity, and the only means of recovering our position. He had therefore, 'authorized' all the officials of the districts to fall back on Patna.

"This Minute was received on the 4th of August, and on the 5th, it was intimated to Mr. Tayler that his proceedings were

wholly disapproved ; that the precipitate flight from two stations, Mozufferpore and Gya, was scandalous and disgraceful to the British name, inasmuch as they were not menaced with immediate attack ; and one of them had a large number of available English settlers near the station, while the other possessed a garrison and other means of defence.

“ The statement of the Commissioner, that he had authorized the officials of the district to come to Patna, was questioned ; because authorization implies the existence of a discretionary power, while the copy of the orders issued to the Magistrate and Collector of Gya, which had reached the Lieutenant Governor, proved that the abandonment of that station was commanded, and left no option to the authorities, as the expression used by Mr. Tayler was intended to convey.” Mr. Tayler was directed to cause the return of the officers. In Gya there were 45 Europeans and 100 Sikhs, but still it was proposed to abandon the station under Mr. Tayler’s orders. This proceeding was characterized as disgraceful, and Mr. Tayler was removed from his Commissionership and Mr. Samuells appointed. “ At the same time a Minute from the Lieutenant Governor was submitted to the Government of India, showing that Mr. Tayler had long been a source of much anxiety to his Honor as Commissioner of Revenue. The Board complained of his unsatisfactory method of conducting his duties, and intimated that unless his conduct towards them changed they could not continue to work with him. In the matter of raising funds for an Industrial Institution at Patna, Mr. Tayler had excited much dissatisfaction and scandal in his division, which was still under inquiry when the present trouble began. At such a time the Lieutenant Governor was naturally anxious to avoid any change in the head executive office of the district, and endeavoured, by constant watchfulness and the aid of the electric telegraph, so to shape the course of the Commissioner as to turn his undoubted intelligence, activity, energy, and local knowledge to good account. But the concealment of his acts and intentions, for the avowed purpose of carrying out such of his views as he thought the Lieutenant Governor would disapprove ; his constant, indelicate, and illegal interference with the course of justice ; his wilful disobedience of an order involving life and death ; and his mixing himself up with the operations of the Police Magistrate and Public Prosecutor against persons whom he subsequently tried as a Judge in the last resort, created such scandal and public discontent as to render it necessary to prohibit his again trying any such cases. By his whole line of conduct he had irritated men’s minds and engendered a feeling of insecurity among the respectable portion of the inhabitants to such extent, coupled

with his questionable proceedings in the matter of the Industrial School, as to render it impossible for the Lieutenant Governor to trust him to call upon the zemindars with the authority he ought to have possessed to assist in keeping the peace in their districts. All those culpable and reprehensible proceedings were crowned by a final act of deplorable want of judgment and discretion, no less than ordering the abandonment of all stations in his district under the influence of a panic, as discreditable as it has proved disastrous. This combination of grave causes of dissatisfaction rendered it absolutely necessary to remove Mr. Tayler from his appointment of Commissioner of Patna." A trustworthy and respectable native subordinate Moonshee Ameer Ali, a Vakeel of the Sudder Court was appointed Special Assistant to the Commissioner of Patna on 700 a month. "The appointment has been a good deal cavilled at in the newspapers, but the staple reasons assigned for objecting to it have always been, first, that Ameer Ally was a native, and secondly, that he was a Mahomedan. To persons of any sense and knowledge of affairs it cannot be needful to offer any refutation of objections so founded. They come from a class of persons who have made themselves ridiculous in the present day by supposing and suggesting that both in regard to Civil and Military operations we can, and ought to act in future by European agency alone, without reposing any trust or confidence on native aid, a thing impossible, even if it were desirable, and who are ignorant or forgetful that even in the midst of all the infamous treachery, cowardice, and cruelty, by which so many of our Indian fellow subjects have disgraced their name and nation there have been not a few signal instances of courage, fidelity, and humanity, on the part of both Mahomedans and Hindoos, and that on more than one occasion natives of both religions have remained to face danger in defending stations, and positions unoccupied or abandoned by Europeans, and have evinced a loyalty and constancy in the service of the British Government, which it would be as impolitic as ungrateful to overlook or to undervalue."

After the outbreak of the 12th Irregular Cavalry at Segowlee, the station being utterly defenceless, the civil officers left the station for a neighbouring Indigo factory on 24th July. "The mutineers were 200 in number, with 150 followers, two elephants, and palanquin carriages; and they stated that they were proceeding on duty to Sewan, by order of Major Holmes. They crossed the Gunduck at Gobindgunge on the 24th and 25th, and on the 26th, the Magistrate returned to the Sudder station." The conduct of the Magistrate was approved. On 1st August, the Magistrate of Behar under orders from the Commissioner quitted Gya, Shergotty and Nowadah, and every civil station, but two,

in the Division were abandoned. "After the civil officers of Gya had proceeded for three miles on the road to Patna, Mr. A. Money, and Mr. Hollings, the Sub-deputy Opium Agent, rode back, found all quiet, and took possession again of the station." On the 2nd, Mr. Money called in a detachment of H. M.'s 64th Foot, and on the 3rd, intimation having been received of the determination of Koer Singh to send a mutinous regiment to Gya. Messrs. Money and Hollings took the 7 lakhs of treasure, and after repulsing an attack, on the 6th reached Chumparun. Their conduct was warmly approved, and the officials informed that officers away from their stations would be placed on out of employ allowances. The officers who had quitted their stations were directed to return. Shah Kuberoodeen, an influential landholder of Sasseram requested to know how he could serve the Government, and was directed to exert his influence to keep his countrymen well affected. In this week also "the detachment of the 8th Native Infantry at Hazareebaugh, the headquarters and artillery of the Ramghur Battalion at Dorundah, and a detachment of the same corps at Purulia, mutinied." They released the prisoners, plundered the treasuries, and destroyed all the property they could. "The troops at Hazareebaugh mutinied on the afternoon of the 30th of July. The officers present at the station fled to Bagoda, and thence came on to Rancegunge, with the exception of Captain W. H. Oakes, who was holding sessions at Hazareebaugh, and made his way to Ranchi." From the report of Captain Dalton on 5th August, at Dorundah "it appeared that a detachment of the Ramghur Regiment, with two guns, under the command of Lieutenant Graham, were marching to Hazareebaugh to attack the two companies of the 8th Native Infantry at that station. On the road they heard of the Hazareebaugh mutiny, and broke out in open revolt themselves, seizing the guns, ammunitions, and four elephants, the private property of Captain Dalton, and in spite of Lieutenant Graham's orders and the expostulations of their native officers, marched back to Ranchi with avowed hostile intentions towards the European residents there." The Europeans reluctantly abandoned Ranchi which the rebels burnt, and then joined the rest of the corps at Dorundah. Captain Dalton proceeded to Hazareebaugh where with the assistance of the Ramghur Rajah he restored order. The treasure lost in Dorundah was 1,25,000 rupees. On 5th August, 93 sepoy of the Ramghur battalion in Purulia mutinied, plundered the treasury containing upwards of a lakh of rupees, released the prisoners, and plundered the town. The European officers returned to Rancegunge. At Dacca, the Christian inhabitants were accepted as Volunteers. In Ber-

hampore, the 63rd Native Infantry and 11th Irregular Cavalry were disarmed, the Cavalry exhibiting a strong spirit of insubordination. The city was also disarmed by the aid of a portion of H. M.'s 90th. At the Presidency all was quiet.

"In the Bhaugulpore Division, the Commissioner appealed strongly against the order to deprive the squadron, 200 strong, of the 5th Irregular Cavalry at that station, of their arms, on the following ground: It would be impossible to disarm the scattered troops in the interior, and it might exasperate the 32nd Native Infantry at Bowsee, and the other detachments in the Sonthal Pergunnahs, as well as cause them to mutiny, and thus lead to the murder of all European officers in the district, to whom no succour could be sent. In any event it would be a partial and ineffective measure, seeing that any amount of arms might readily and quickly be obtained at Monghyr. The Commissioner, therefore, earnestly hoped that the order might be countermanded." The disarming was not carried into effect. The urgent necessity of protecting Ranecgunge was pointed out, and the probability of a mutiny of the Shekawattce battalion at Midnapore urged on the Government. On 4th August, it was suggested that the Lieutenant Governor could raise one or two thousand men from the tribes on the North-East frontier. The proposal was sanctioned. Another for raising a regiment of Sonthals was referred to the Commissioner of the Southal Pergunnahs. "The Officiating Commissioner of Arracan, was requested to report upon the feasibility of raising a Mugh regiment in that province for general service." A proposal to raise a force among the tribes of the South-West frontier was submitted to the Commissioner of Burdwan for report. Orders were issued to collect carriage for the Madras troops to march up the Grand Trunk Road.

On 9th September, the Government of India forward a narrative from the Government of Bengal up to the 15th August. On 8th August, the Commissioner submitted a report from the Magistrate of Shahabad on the defence of Arrah, on 25th July, the Magistrate of Arrah had received an express from Dinapore warning him that disturbances were expected. On the 26th, a sowar reported that sepoys were passing the river. The police fled, and the Magistrate with all the Europeans, and Syud Azimooddeen Hoossein, Deputy Collector and 50 Sikhs went into a bungalow fortified by Mr. Boyle. Atta, grain and water were also laid in. The insurgents reached the station on 27th July, plundered the Treasury, and attacked the bungalow. Koor Singh soon appeared to direct operations; the Sikhs rejected all attempts to bribe them. "On the 28th, two small cannons opened fire on the bungalow, one of them

with 4 lb. shot. They were daily directed to what were considered the weakest points of the little fortress, and at length the largest of the guns was placed on the roof of Mr. Boyle's house.

"This completely commanded the bungalow, and nothing but the cowardice, want of unanimity, and ignorance of the enemy, prevented the entire destruction of the little fortress. The siege lasted a week, during which time every stratagem was employed in vain. The guns were at first fired as often as shot could be prepared, ammunition being at that time deficient, and incessant assaults were made against the bungalow. The Seikhs were not only perfectly cool and steady, but by untiring labour met and prevented every threatened disaster.

"When the supply of water ran short, they dug a well of four feet diameter, to a depth of eighteen feet, in less than twelve hours. Breaches in the works were at once repaired and rendered stronger than before; and as the siege was protracted, the defences became stronger. When the want of animal food was felt, a night sally was made, and four sheep were brought in. As soon as the enemy were discovered to be mining, a countermine was sunk." On the 30th, the rebels defeated a pursuing force, and on the 31st, they offered the Seikhs their liberty. On 1st August, all the Garrison were offered their lives on surrender of their arms. "The conspicuous gallantry and exertions of Messrs. Boyle and Colvin were prominently noticed by the Magistrate, and an earnest appeal was made for the signal reward of the brave and devoted band of Seikhs.

"The Commissioner warmly seconded the proposal, recommending that the thanks of the Government should be given to the garrison, and in particular to Messrs. Wake and Boyle, that the native officers of the Seikhs should be immediately promoted, and a gratuity of twelve months' pay be granted to the men." Patna, Chuprah and Mozufferpore were reported perfectly quiet. A reward of Rs. 10,000 was offered for Koer Singh, and a force of 150 Sikhs and 37 of H. M.'s 84th were sent to recover Gya. Details are added of the reoccupation of the abandoned stations, one of which, Mozufferpore, was defended by the Nujcebs against the sowars of the 12th Irregular Cavalry, and the narrative proceeds. Koer Singh's forces were marching leisurely up the Grand Trunk Road towards Mirzapore. Major Eyre with 500 of H. M.'s 5th and 200 Sikhs was marching to Jugdispore, the seat of Koer Singh. The place was abandoned and blown up. In Bhaugulpore, the Commissioner Mr. Yule detained 100 men of H. M.'s 5th Fusiliers at Berhampore, and sent 50 to Monghyr. He himself on 18th August with 80 troopers of the 5th Irregular Cavalry went to Purneah to remove

some treasure and returned on the 13th. On the 14th the 5th Irregular Cavalry went off with their arms. They marched towards Arrah. In the Rajshahye Division all remained quiet, but there were constant plots in the 73rd Native Infantry at Jelpigoree. The only other disturbed district was the South West frontier, Captain Dalton on 13th August had to fall back from Hazareebaugh. On 18th August, Martial Law was proclaimed, and Captain Dalton "was informed that the moment the Artillery, hourly expected from Madras, arrived, a force consisting of European Infantry, Madras Artillery, Cavalry, and Sepoys, would be sent up in two columns, to restore order on the South-West Frontier. The march of the force was necessarily delayed for want of Artillery, as without guns it was not deemed-right to send any force to reduce the Dorundah mutineers. One column was to march by the Grand Trunk Road to Burhie and Hazareebaugh, the other to proceed by Purulia and Ranchi. Captain Moncrieff, who possesses an intimate knowledge of the roads in the district, volunteered to accompany the force. A hope was expressed that Captain Dalton would be able to hold his own, until this force was available."

On September 10, the Government of India forward continuation of the Bengal narratives up to 22nd August. In this week Chupra and Gya were reoccupied on the 10th. The sepoys had gone towards the North-West, and order in all the districts began to be restored. Bhaugulpore remained quiet, the 32nd at Bowsee firing on the 5th Irregular Cavalry as they passed. In Rajshahye, there was no disturbance, but some uneasiness felt at Jelpigoree. In all other divisions quiet prevailed. In Chota Nagpore, the mutineers at Dorundah remained passive, and did not divide the treasure or plunder the station. Those of them who were raised in the district were afraid for their families, who were within the estates of the Rajah of Ramghur. The narrative details the services of several native gentlemen

On 10th September, the Government of India forward a narrative from the Government of Bengal up to 29th August. The Behar Division remained quiet, but was endangered by the abandonment of Goruckpore. The opium godown was fortified and supported by six guns bearing on the town. "Koer Singh was at Akherpore, near Rhotas, on the 21st of August; Ummer Singh was living in the Hills flanking the Grand Trunk Road, near Sasseram, and creating uneasiness in consequence. When last heard of (29th August), Koer Singh, with 1,000 men, was at Biddeegurh, and Ummer Singh, with 5 men, at Kuchooher, in the Hills above Parnah, on the Soane; and Nisbun Singh,

Joohun Singh, of Typore, and Takurdial Singh, were with Koer Singh."

"In Bhaugulpore, the mutineers of the 5th Irregular Cavalry, after destroying the bungalows at Rohnee, extorting 12,000 rupees from the rich inhabitants of that village, and being joined by the Doomka detachment, proceeded towards Bowsee and Deoghur, from both of which places they were kept off by the loyalty of the 32nd Native Infantry. They marched eighty miles in two days, and left their baggage and servants behind. They were last heard of at Chackye, in the Monghyr district, and were marching westwards." All else was quiet, and also in the Sonthal Pergunnahs. It was determined to raise a small force of military police from among the Sonthals. In the Nuddea Division all was quiet, the Mohurram having passed without disturbance. The following arms were found in the city of Moorshedabad :—"22 wall pieces; 3 brass field pieces—viz., 6, 3 and 2, 6-pounders; 12 iron field pieces, from 3 to 6-pounders; 5 siege guns, 3 nine-pounders and 2 six-pounders. The number of small arms taken was 2,000."

In Burdwan nothing of importance had occurred. The usual relief of the 73rd at Dacca was postponed; a force of Mughls and native Christians was proposed for Backergunge by the inhabitants. It was submitted to the Supreme Government as part of a general proposal for raising a small trained force of special castes for service in each division. They were to act in cases where the ordinary police was resisted. "The Subadar in command at Sumbulpore, Shaikh Panch Kourie Khan, received a letter from the Subadar in command at Ranchi, Jye Mungul Pandey, directing the former to march to Dorundah with the treasure, and if he experienced any difficulty about carriage, to release and make use of the convicts in the jail. He was warned by the Subadar at Ranchi to be expeditious in his movements, or a force of Madras troops would soon be down upon him from Cuttack. The Subadar showed the letter to Captain Leigh, and was using every exertion to keep his detachment steady and faithful." The Madras column started for Sumbulpore on 28th August.

In Chota Nagpore, Hazareebagh was re-occupied on 28th August by 150 Sikhs under Lieutenant Earle. A police corps was ordered to be raised in Chota Nagpore. Captain G. N. Oakes was directed to retake Purulia and Lieutenant Birch Chyebassa. The Principal Assistant Commissioner of Chyebassa left his station for fear his own soldiers should revolt, and was permitted to resign his appointment. "Colonel Jenkins, the Commissioner of Assam, was of opinion, that if the 73rd Native

Infantry mutinied at Julpigoree, many of them would betake themselves to the Bootan Doars, and that the Soubahs, taking advantage of the defenceless state of the frontier, with the aid of the mutineers, would lay waste the Rungpore District, and perhaps plunder Cooch Behar.

"The Doars appear always to have been frequented by adventurers from Oude, and it was not improbable, after the restoration of tranquillity, that numbers of the disbanded soldiery would take service with the Bootan Soubahs, both for a livelihood, and to revenge themselves on the subjects of the British Government." It was suggested that a corps might be raised from the tribes in the Doars. It was also proposed "to organize on a sufficiently extended scale, and under special superintendence, a department of supply for carriage and food including the collection, at suitable depots, of all animals, gram, fodder and other necessaries for the use of troops on the march and for a complete Carriage Establishment of carts, draught and hack cattle, with elephants, camels, and drivers, so as to obviate the necessity for impressment at the time of need, with all the evil consequences to troops and people, therefrom ensuing." In a Postscript it is added that the latest intelligence from Assam is of a very unfavourable character.

On 23rd September, the Government of India forwards a continuation of the Bengal narrative up to 12th September. This week Behar was exposed to the danger of invasion from Goruckpore. The Europeans at Dinapore could not be detached. Those marching along the Grand Trunk Road were required to clear that important line of communication. Major Eyre's regiment was required to relieve Lucknow. "Koer Sing and his brother Ummer Sing were said to be still in the vicinity of Rhotas and Sasseram. The former, however, was believed to have proceeded towards Rewah, and to have opened communications with the Goruckpore rebels. He was also said to have quarrelled with his brother, accusing the latter of being the cause of the disastrous defeat at Jugdispore. The force of Koer Sing was conjectured to consist of the greater part of the mutineers of the 40th Native Infantry, who were natives of Shahabad, and of a rabble of retainers 2,000 or 3,000 in number." All ladies and children were directed to be sent away from the disturbed districts. "The evidence against the Dewan of the Rajah of Bettiah being of an unsatisfactory nature, amounting to a mere suspicion, he was at once released by the Commissioner. Inquiry was ordered into the recommendation of Mr. Tayler to confer a title upon this native gentleman.

"There being no proof worthy of the name against the Waha-

bee gentlemen, they were all released with the exception of one, against whom there was said to be matter of an implicative nature found in a letter discovered in Peer Ali's house.

"The Magistrate's Nazir was also released from custody, there being no proof against him, the facts recorded by the late Commissioner on which the charges were based having been denied on oath by the late Magistrate." The estates of Koer Singh and his brother were attached, and a proposal made to the Government of India to fine heavily all villages taking part in the rebellion. Gya was threatened by the 12th Irregular Cavalry, but defended by Captain Rattray with some Sikhs. Rajshalye and Nuddea were tranquil and so was Bhagulpore and Burdwan, Dacca, Chittagong, and Cuttack. In Chota Nagpore authority had been restored at Hazareebaugh. Purulia was recaptured by Captain G. N. Oakes on 3rd September.

In Cherra Poonjee orders were issued to raise two corps each of 1500 Munipoories. "There is much reason to fear the extension of the revolt to Assam, as another result of the unfortunate disaffection of the Dinapore Brigade.

"Many of the men of the 1st Assam Light Infantry are from the Arrah district, and closely related to the mutineers of the 40th Native Infantry. Some of them are from the estates of Koer Sing, and an uneasy spirit has lately been perceived to prevail among them. From information collected from independent quarters, the men of the regiment above mentioned appear to have been in communication with the Jorehat Rajah Saring Kunderpessawar Singh, and to have offered to retake the province and hold it for him pending the receipt of final instructions, it is believed, from Delhi." No reliance could be placed either on the 2nd Assam Light Infantry. The plan was to murder all Europeans during the approaching Doorgah Poojah vacations. A force of European scamen was therefore sent to Dibrooghur. Orders have been issued to send term convicts to Malacca and life prisoners to Penang.

An inclosure continues the narrative to September 19th. The mutineers of 5th Irregular Cavalry, after destroying the public buildings at Rohnce and levying contributions on the inhabitants marched towards Gya. On the 8th September, Captain Rattray had a skirmish with them, but his force was inadequate and he retired with 20 wounded out of 200. The mutineers reached Gya and made a demonstration against the fortified house there, but uselessly, and on the 9th after murdering the Moonsiff of Behar made off for the Soane. On 12th September, they reached Baroon. There were no troops except the few marching to the North West who could not be spared. Orders were issued to deal summarily with any villages stopping the coal boats sent

to supply the steam stations. Shah Kubeerooddeen of Sasseram was appointed Honorary Magistrate for his services and recommended for the special notice of the Government of India.

In Chota Nagpore the Ramghur mutineers were still at Dorundah afraid to move the zemindars being in arms against them. Purulia was reoccupied on the 10th September, but the proceedings of the Rajah of Pachete were suspicious, and the Purulia Rajah said his life was threatened.

In Cherra Poonjee the enlistment of Munipoorees progressed. All the men are engaged for general service.

Orders were received to form a temporary cantonment at Raneegunge. On 10th September, Mr. J. R. Ward was appointed Superintendent of Carriage and Supplies in the Bengal Division of the Grand Trunk Road. On the 14th September, Colonel Fischer with his brigade was ordered to march to Dorundah via Hazareebaugh.

On 8th October, the Government of India forward a narrative from the Government of Bengal bringing events down to the 26th September. Patna continued quiet and a Naval Brigade under Captain Sotheby of H. M.'s steamer *Pearl* was sent up to the district. Orders were issued to enquire into the conduct of the Rajah of Doomraon. The 5th Irregular Cavalry were ascertained after a career of rapine to have joined Ummer Singh. The narrative analyses a remonstrance by Mr. Tayler against his removal from the Commissionership. The order to retire is stated to have been unconditional having been reiterated to the Judge of Behar, and it was attended with most disastrous effects. "The publication by Mr. Tayler of the correspondence connected with his case, while it is still *sub judice*, is not only directly opposed to the Court of Directors in such matters, but is an act of gross and manifest impropriety. The promulgation of the private opinions of Mr. Tayler's friends upon an *ex parte* statement, and the judgment of the propriety of the orders of this Government by officers directly subordinate to it, are of such questionable taste, and of such mischievous tendency, as to deserve marked and emphatic disapproval." Bhau-gulpore including the Sonthal Pergunnahs remained undisturbed. The Rajshahye Division was tranquil, as also were Chittagong, Nuddea and Burdwan. The Pachete Rajah however was said to be collecting armed men, and the Sonthals round Manbhoom were distrusted.

"In Cuttack, a report was received from the Agent in the hill tracts of Orissa, to the effect that a body of 300 men, consisting of sepoys, matchlock-men, and sowars, had crossed the Mahanudy from Sumbulpore, and had proceeded in the direction of Nagpore." Assam was more settled.

"In Chota Nagpore, on the 11th of September, the Dorundah mutineers, after destroying the public and private buildings in the station, plundering the town, committing every species of atrocity on the towns-people, and beheading an old native doctor, attached to the jail, marched in the direction of Tikhoo Ghaut. They had four guns, with a large quantity of ammunition and plunder." The sowars of the Regiment except four joined their officers at Hazareebagh. "A portion of the column under the command of Major English of Her Majesty's 53rd Foot reached Ramghur on the 19th, in progress to Ranchi." His force consisted of a wing of 27th Madras Native Infantry, a detachment of 180 men of H. M.'s 53rd and two guns. It was hoped Major English would overtake the Ramghur mutineers. On 16th September, Lieutenant Birch reoccupied the Colehan. The detachment from Cuttack reached Sumbulpore safely on 13th September.

Several arrests were made in Calcutta, and "the Act relating to the importation, manufacture and sale of arms, and for regulating the right to keep or use weapons of any kind, having become law and been promulgated, a series of rules to give effect to the law in the least objectionable manner, was submitted for the orders of the Government of India. The points of greatest interest in the proposed Regulations were, that the Lieutenant Governor should have the power of exempting from the provisions of the Act all Europeans, Eurasians, and Foreigners belonging to European nations, as well as all native gentlemen of known and approved loyalty, such as the Rajahs of Bettiah, Hutwah and Seraikela, and Shah Kubeerooddeen Ahmed of Sasseram, as the arms possessed by all such would invariably be employed in the cause of order and in the interests of the Government.

"A copy of a Resolution of the Governor General in Council, to the effect, that His Lordship is not prepared to admit the claims of sufferers by the insurrection to be made good out of estates and property confiscated, was communicated to the Government of Bengal."

On 3rd October, the Government of India forward the first narrative from the Lieutenant Governor of the Central Provinces. "The Lieutenant Governor started from Calcutta on the 6th of August late in the evening. He received his first dispatches from these Provinces at Patna on the 19th of August. He arrived off Ghazeepore on the 24th of August, and landed on the 28th of August at Benares, where his Head Quarters now are." In the Allahabad Division civil Government was confined to the Allahabad district. "The portion south of the Jumna was in good order, owing chiefly to the

worthy conduct of the Rajah of Mandah. In the Doab portion of the district a large part of the population had not returned to their villages. In the portion north and east of the Ganges the line of the Grand Trunk Road and the country between it and the Ganges was maintained, but to the north of that line the country was suffering from incursions of the Oude zemindars." In Futtehpore, a few Police stations had been established along the Grand Trunk Road, but the portion of Allahabad north of the Ganges, and bordering upon Oude has been given up.

Goruckpore was abandoned on 13th August.

Azimgurh.—The Goorkha force reached the station on 27th August. The Civil officers who left on 29th July returned on 3rd September. A severe example made by the Goorkhas of a rebellious village had a good effect, and some arrears of revenue have been realized.

Juanpore.—A Goorkha force marched in on the 7th instant. The Civil officers have returned.

Benares and Ghazeepore are tranquil.

Mirzapore.—Koer Singh marched through the Southern Pergunnahs burning and plundering. The country near Gopcegunge is unsettled.

Jhansee.—These districts are absolutely out of our possession.

Nagode, Mundlah and Seonee generally quiet. "The Madras moveable column left Jubbulpore on the 19th of August, reaching Dumoh on the 30th of the month. No resistance was met with. Rumours of disaffection at Jubbulpore caused a part of the force to be sent back there on the 7th instant." The Saugor fort was well on 4th September.

A letter dated October 8th covers the continuation of this narrative to September 26th.

Allahabad.—The Railway is nearly ready to Tokunda 42 miles.

Futtehpore.—Military occupation has taken place, and the civil officers are directed to rejoin. A Police corps is to be levied only from classes specially excluded from the ranks of the Regular Native Army by Military Regulations. "No part of the Cawnpore district can be said to be under Civil Administration. The power of the British officers at Cawnpore extends but a short distance from the station. The Military Magistrate, Lieutenant Bruce, has organized a small Police Force, which holds the country round Cawnpore, and permits the supply of the ordinary bazars."

Banda and Humeerpore remain unoccupied.

Ghazeepore.—Tranquil.

Benares.—Quiet.

Mirzapore.—A detachment of a Madras Regiment was sent from Benares on 21st September to this station.

Gopeegunge.—Mr. Mayne posted here has been directed to establish an intelligence department.

Juanpore.—The Magistrate is beginning to restore quiet, and 30,000 Rs. have been collected. In the west of the district there are armed Zemindars who require to be suppressed. "The rebel Nazim of Sultanpore, Mehndee Hussun, appears to direct the movements of the insurgents on this frontier. He is understood to be on his way from Lucknow, his Deputy or Naib on the spot being one Bunda Hussun. Banee Madhoo, the Rajah of Atrowlia in Azimgurh, has been appointed Nazim of Azimgurh and Jaunpore, under the rebel Government of Lucknow. This man and Iradut Jehan, Rajah of Mahoul, are the chiefs of the insurrection in these two districts. The son of the latter is said to have been engaged in the fight at Mundoorree." The Goorkhas on 20th September defeated a body of rebels from Atrowlia at Mundoorree. New instructions have been given to the officers in command of the Goorkhas, a force which has been very inactive.

Goruckpore.—No change.

Saugor.—"The reports of the whole of this Division are generally much in arrear.

"From Seonee all is reported quiet to the 7th September.

"From Mundlah, to the 31st August all quiet; but a more recent letter from the Commissioner mentions that some of the Talookdars in the jungly parts of the district had rebelled and are plundering their neighbours.

"From Nursingpore, till 8th September, all quiet.

"From Hoshungabad, till 8th September, all quiet.

"From Baitool, till the 8th September, all quiet.

"From Saugor no reports have been received, the daks being stopped.

"Of Nagode, the last detailed Report is dated the 3rd September." 250 of the mutinous 50th were marching to Mirzapore with their officers. The ladies had arrived in safety at that station.

On June 18th, the Government of India report to the Court of Directors their legislative proceedings. Martial Law was declared in the Allahabad and Benares Divisions on the 9th June.

On 12th June, Commissioners under Act XIV. of 1857 were authorised to inflict death on all marauders or men guilty of robbery with violence. This Act was extended over the Punjab, the North-West and Oude. "We desire to draw your attention specially to an Act (No. XV. of 1857) which was passed in the Legislative Council on the 13th of the present month, 'To regulate the establishment of Printing Presses,

and to restrain, in certain cases, the circulation of printed books and papers.' The circumstances which led to the passing of this law will be gathered from our Resolution of the 12th instant, and the extracts from certain native newspapers therein referred to. You will perceive that the Law Officers of the Government have been directed to take the necessary steps for bringing the printers and publishers of the *Doorbeen*, the *Sultan ul Akhbar*, and the *Sumachar Soordaburshun*, to trial before the Supreme Court, on a charge of publishing seditious libels."

On 4th July, 1857, the Governor General in Council reports to the Court of Directors on the measures adopted to restrict the liberty of the Press. Act XV. of 1857, passed without a dissentient voice, placed the Indian Press very much "in the position in which it was permanently before Sir Charles Metcalfe's Government in 1835 passed Act No. XI. of that year, whereby complete liberty was given to it." That Act was passed in opposition to the opinions of many Indian officers, among them Sir Thomas Munro. That Act was disapproved by the Home Government, and the Government of the day severely censured for passing it. Its reconsideration was ordered with a view to its repeal. It is not, however, in consequence of those views that the Act is supported, but on the principles laid down by those who passed the measure. Mr. Macaulay who prepared the law, recorded in his Minute an opinion that five gentlemen "who may be brought together in half an hour, whose deliberations are secret, who are not shackled by any of those forms which elsewhere delay legislative measures, can in a single sitting make a law for stopping every Press in India." Sir Charles Metcalfe said, "I do not apprehend danger to the State from a free Press, but if danger to the State should arise, the Legislative Council has the power to apply a remedy." Mr. Prinsep said, "I think the eye of the Government will require to be kept continually upon the Press, and especially upon the native Press, for it is capable of being made an engine for destroying the respect in which the Government is held, and so of undermining its power." Colonel Morison said, "I could wish, however, that the proposed draft should provide some means of applying a speedier remedy to the abuse of the Press, in any emergency when the Governor General might be absent from his Council, or when there might be an urgent necessity for the Government of any of the Presidencies, to act without the delay of a reference to the Governor General of India in Council." He was not free from apprehension as to the effect that might be produced on the mind of the native Army. Lord Auckland said, "the strong arm of authority might, before the passing of this Act, have

been put forward to check any excess; and now, should the safety of the State ever demand such a course, in a single hour a law may be passed to stop or to control every Press in India; nothing has been lost of useful power." Lord W. Bentinck said, "but I have always said and thought that, as well with the liberty of the Press as of the subject, it is indispensable for the safety of the empire that the Governor-General in Council should have the power of suspending the one, and of transporting the other, whenever the safety of the State should call for the exercise of such authority. We cannot doubt that you will see, in the present critical state of affairs, an emergency of the nature contemplated by the Governments of Sir Charles Metcalfe and Lord Auckland; and one, it may be confidently assumed, very much graver than was thought in 1835 to be within the range of probability." We are well aware of the angry and unreasoning opposition such a measure will call forth, but the safety of the country is the one great object, and to this all other considerations must give way. The conditions are as mild as possible consistent with the object in view. No distinction was made between the European and Native Press in accordance with the view of Sir C. Metcalfe who wrote I think that in all our legislation we should be very careful not to make invidious distinctions between European and Native subjects. Though we do not fear treasonable matter will be designedly published in any English newspaper we have to guard in these times against errors, indiscretion, and temper as well as against sedition. "The interest which matter published in English newspapers excites even in foreign native courts, is, perhaps, not so fully known in England as it is in India. Our connection with the Burmese Court is not of long standing, and the King of Ava would seem to be as far out of the way of the Press as any potentate with whom we have any relations at all. Yet not many months ago a gentleman in our interest at Ava complained that he had been compromised by an article that had been published in a Calcutta newspaper; and it then appeared that His Burmese Majesty had the Calcutta papers regularly examined, and matter of interest therein contained regularly explained to him. To show that the necessity of controlling the English as well as the Native Press is not merely imaginary, it will be enough to state, that the treasonable proclamation of the King and mutineers of Delhi, cunningly framed, so as to inflame the Mahomedan population as much as possible against the British Government, and ending with the assurance that the multiplication and circulation of that document would be an act equal in religious merit to drawing the sword against us, was published in a respectable English newspaper

of this town without comment. For doing the very same thing, with comments having the outward form of loyalty, the publishers of three native Mahomedan papers in Calcutta have been committed to the Supreme Court, to take their trial for a seditious libel."

The first case in which the law was violated was in the *Friend of India*. That journal published an article infringing every one of the conditions. The position of affairs was most anxious, and the paper was warned. The next Number contained a defiant repetition of the objectionable matter. The paper would have been suspended, "when we received from the friends of the proprietor an assurance, in which we placed reliance, that arrangements had been completed, under which, in future, the paper would be conducted in conformity with the prescribed conditions." The licence of a lithographic press in Calcutta has been withdrawn, its Persian newspaper *Gulshun-i-Nan Behar* containing grossly seditious articles.

On 26th August, the Court of Directors approve Acts XIV. and XVI. of 1857, and entertain no doubt of the necessity of some such measure as the Press Act. They notice with satisfaction the loyal addresses received.

On 1st July, the Governor General in Council reports to the Court of Directors that "an Act was passed in the Legislative Council, and received the assent of the Governor General on the 20th June (Act No. XVII. of 1857), empowering every Sessions Judge, and every officer exercising the powers of a Sessions Judge, to try officers and soldiers of the Native Army for mutiny or desertion, and to sentence them on conviction to death, transportation, or imprisonment. The Act also enables the Government to vest with this power any other person or persons, by issuing a Commission under Section 2." The remainder of the despatch is purely official.

On 16th July, the Governor General in Council again reports that the bullock train establishments have been placed at the disposal of the Military Authorities to convey Brigadier General Havelock's column. The bullock train has since been sent on to Allahabad. His Lordship in Council forwards copy of a Proclamation offering rewards for the delivery of mutineers, deserters and others. "We have also desired that the steam ferry boat intended for Patna, and those at present in Arracan, should be fitted out with all expedition for service on the Ganges as gun-boats. Meanwhile, one of the river steamers has been ordered to be fitted out as a gun-boat for service on the Ganges, under the command of Lieutenant H. Batt of the Indian Navy. She is to carry an European crew, and to tow up three of the boats belonging to the steamers of the Indian Navy, properly armed."

In another letter dated August 7th, His Lordship in Council after reviewing facts already given observes, "we are also in communication with the Peninsular and Oriental Steam Navigation Company for the conveyance from Suez of the troops that may possibly have been dispatched to India by that route soon after the intelligence of the mutinies reached England. It is understood that the ordinary mail steamers of this Company can bring 400 men from Suez each trip, and more if there are few passengers. Instructions have accordingly been given for preparing the *Bentinck*, the steamer which conveys the present mail, for the reception on board of that vessel of as many men as she can convey in addition to the ordinary passengers. The only preparations necessary on board are the provision of additional cabooses and cooking vessels for the men, and the adoption of arrangements for their cleanliness. The Commissariat Department has been ordered to provision the vessel. Similar preparations for the conveyance of troops will, for the present, be made on every succeeding mail steamer." And in another letter dated 7th October reports, "in regard to the provision of coal at Galle, it will be seen that arrangements have been made for a supply of 10,000 tons. The Bombay Government have been desired to send all the coal that they can spare. The Peninsular and Oriental Company and the Australian Company will probably together be able to afford about 3,000 tons. Supplies have been ordered from Akyab and Moulmein. About 4,000 tons may be expected from England during this and the following month, as advised in the letter from the Secretary at the India House dated the 10th August last. The Superintendent of Marine has also despatched a supply of 3,000 tons of the best Burdwan coal. About 700 tons of English coal are supposed to be in store at Trincomalee, and more is understood to be coming from England."

DISTRICT ROADS.

For 1855-56.

Madras Records, No. XLVII.

ON 23rd December, Lieutenant Colonel C. E. Faber, Chief Engineer, presents the Collectors' Reports on District Roads to the Government of Madras. The delay has arisen from some of the Collectors imagining that the reports were to be written by the District Engineers.

Ganjam.—The roads in this district are still under construc-

tion. "The Chicacole bridge has been completed, and the new roads through that town are in progress, as is the Itchapore bridge, whose arches were being turned when Mr. Knox wrote. The road between Rambah and Berhampore is now in very fair order, and so is that between Aska and Berhampore."

Vizagapatam.—The roads projected in 1853 are not completed. The department is inefficient, and too much work has been attempted at once. The district therefore is covered with incomplete roads, many of which must be postponed for an indefinite period.

Rajamundry.—The road through the hill talooks of Jud-dunghy is in progress. A new road from Samulcottah to Coconada is much required, and might be constructed on the face of the dyke erected for the canal already sanctioned.

Masulipatam.—"The only improvements made to the roads in this country are, the commencement of the repairs of the Hyderabad road from Ibrahimpatam to Madeveram on the Nizam's frontier, the clearing of a few tracks from one village to another, and the partial formation of a road from Goodewada to Parrimannoo on the Trunk road leading from Bezoarah to Masulipatam; the portion of this line already finished, having proved very serviceable." A road may be made from Bezoarah to Masulipatam on the dyke face of the canal connecting the two places.

Guntoor.—The construction of four bridges has been suspended by the incompleteness of the arrangements for the Kistnah channels. Two bridges, the Butteprole bridge over the Nellattore channel, and the bridge, over the Salt Nullah near Carlapollem have fallen, but the reason is not given. The report is meagre and devoid of interest.

Nellore.—The Collector reports that if funds are forthcoming to complete the present lines of road the road system will be excellent.

Cuddapah.—Progress during the year has been very unsatisfactory from want of funds.

Bellary.—Rs. 2,14,458 have been expended in repairing old roads, but the Collector gives no details. The communications of this district have long been defective.

Kurnool.—No new line has been commenced in this district.

Chingleput.—No more roads wanted except as cross lines.

North Arcot.—Five roads have been completed, and nineteen more await completion. Eight which are sanctioned have to be completed, and seventeen require sanction.

South Arcot.—150 miles of road have been completed and improved during the year. There is every prospect of the district becoming gradually well provided with roads.

Tanjore.—The expenditure in this district was Rs. 1,56,917 which is insufficient. Rs. 9563 has been granted for the roads between the Grand Anicut and the Coleroon, and between Tanjore and Negapatam.

Madura.—"The roads generally in the Northern and Western parts of Dindigul are not in good order, but for the repair of some of them, provision has been made in the Budget of the current year and the works will be shortly undertaken."

Tinnevely.—Various improvements have been effected especially on the principal Northern Road.

Coimbatore.—The communications are in good order from the exceeding attention paid by the Collector. The expenditure during 1855 amounted to Rs. 50 a mile, and on the Neilgherries to Rs. 97 a mile.

Salem.—The Trunk Road is still in a bad state, but an estimate for repairing it has been sanctioned. "The branch road between Yadapaudy and Sunkerrydroog is nearly completed. The Topoor Pass is quite finished, as also two bullock roads from Yercaud to Darampoory and the Salem side of the Shervaroy Hills "

Canara.—The condition of the roads is generally satisfactory.

Malabar.—The cross roads and some of the great roads are in an extremely bad condition. The report contains the details condensed by Lieutenant Colonel Faber and tables shewing name of work, date of sanction, and amount expended.

ANNUAL ENGINEERS' REPORTS.

For 1856-57.

Bombay Records, No. XLVI.

On 22nd November, 1855 the Government of Bombay requested the Executive Engineers of the Presidency to send up Annual Reports on the model of those published in Madras. These orders have now for the first time been obeyed. On 5th June, 1857, the Acting Executive Engineer of Dharwar, Lieutenant G. Close reports very few new works have been commenced during the year, but the expenditure on repairs, and especially repairs of tanks has been very heavy. He mentions details the most important of which is a new bridge at Hooblee just completed of three arches of twenty-feet span. It cost Rs. 4,480 and was built under charge of Sergeant Mungavin. The ryots in the district are usually willing enough, but when they promise

subscriptions on condition that Government shall pay the same sum, they never pay, and the estimates are thrown away. Government should always require some security.

Belgaum.—The Acting Executive Engineer, Captain W. R. Houghton reports an expenditure of Rs. 1,00,566 during the year :—

				Rs.	As.	P.
" Roads, Bridges, &c.,	...	...	...	52,993	14	5
Ferry Boats,	...	..	..	630	7	5
Tanks,	..	..	...	1,058	13	5
Military Buildings,	..	..	..	40,617	11	0
General Buildings,	..	..	...	360	11	1
Territorial Buildings,	..	..	...	4,154	2	11
Judicial Buildings,	...	..	...	96	12	1
Ecclesiastical Buildings,	..	...	..	653	8	7

Total, 1,00,566 0 11"

He considers that the roads require more expenditure, running as they do through rich black soil called regur. The roads in the Collectorate were originally badly lined out. The road from Belgaum to the Coast via Parpolee Ghaut has been sanctioned, and Rs. 1,37,000 made available for the work. It will be finished in about four years, previous to which repairs have been made in the road over the Ramghaut, a road far too steep. Other roads have been planned, and Rs. 1,058-13-5 expended on repairs of tanks. Captain Houghton considers irrigation wanted, but points to the absolute need of a supervising Agency. One officer cannot supervise the works through a district of 6515 square miles. He considers that four Assistant Executive Engineers are indispensable. On 4th July, 1857 Lieutenant Colonel J. Kilner, Superintending Engineer, Southern Province concurs in the necessity for more aid, but does not think four Assistants necessary yet. On 4th August, General Waddington, Chief Engineer, criticises Captain Houghton's report, considers it confused, and adds that the efficiency of the department in Belgaum depends mainly on the return of Captain Dickinson as Executive Engineer.

Rutnagherry.—On 19th June, Lieutenant T. P. Armitstead, Executive Engineer, reports that the new road over the Phonda Ghaut has been completed. It has still to be tested, and the Engineer expects some serious land-slips. Natchnee has been sown on the side embankments, and castor oil and thistle seeds are also to be tried. "The result is, that the cutting of the Phonda Ghaut, eight miles long and twenty-eight feet broad, was executed by 982 labourers in 484 days, 282 of which were monsoon." Mr. Armitstead details the ordinary works com-

pleted, and adds a list of works proposed. The most important of these is for a perfect road between Phonda Ghaut and Waghotun, $27\frac{1}{2}$ miles to cost Rs. 1,39,868. This road has been marked out with guage paths and stone pillars. General Waddington considers the inclines on the Phonda Ghaut road too steep.

Kolapore.—On 6th June, Lieutenant A. Davidson, Executive Engineer reports that the Beejapore and Kolapore Road is nearly completed. Several wells for troops have been sunk successfully. The Amba Ghaut has been surveyed, and an easy line found with a slope of 1 in 20. An estimate will also be submitted for the Kajeerda Ghaut, and another for a first class road from Beejapore to Dajeepore. Lieutenant Davidson complains of want of assistance. He has to frame and revise all estimates, and has no surveyor competent to carry out any work, and no mestrees who could do any thing without supervision. The 500 miles of road in the district have been measured.

On 12th June, 1857 Captain H. A. Adams, Executive Engineer reports that some tanks have been completed, some roads improved, a bridge of nineteen arches of fifteen feet span completed near Yenegaum, and other bridges designed or planned. Some roads have been improved, but nothing of importance has been attempted, and Captain Adams complains of want of assistance. The amounts expended were

Roads,	Rs. 9,642	15	5
Bridges,	8,467	0	6
Public buildings,	4,848	1	1
Dhurmsalas,	1,000	0	0
Irrigation,	31,147	10	9
Ferries,	2,920	15	9
Well,	373	5	1

The cost of supervision has been 22 per cent. of expenditure.

Sattara.—On 25th May, Capt. Kennedy reports that the great road from Chiploon to Kurar over the Koombaree Ghaut for which Rs. 6,52,916 was sanctioned has proceeded; of the most difficult section of the work, the Patna bridge, Captain Kennedy incloses a photograph (reproduced in the printed record.) Rs. 2,10,344 has been expended in the year. The Ghaut portion of the works on the Road from Wace to Sheerwul is nearly done, and the cart road over the Wurrundur Ghaut will open after the rains. Smaller roads have also advanced, and the following projects have been submitted :—

“Embanking and mooruming road between Sattara
and the Warna River, Rs. 52,600

Bridging and draining road, with the exception of seven large streams,	52,514
Clearing line of road between Loonud and Punder- poor <i>viâ</i> Phultun,	20,350''

There has been little time for works of irrigation, but Captain Kennedy is of opinion that small works will be of more immediate and greater benefit to the Collectorate than heavy undertaking. They take less time to discuss and to execute. A plan for bringing water to the town of Sattara from the Yenna is under consideration, and preliminary estimates are being made. Captain Kennedy thinks more superintendence would enable him to get the work done cheaper. There is a deficiency of masons in the district, and the traditionary rate of wages is too low. The people too are most difficult to keep at work on the Ghauts which they dislike. The writers too are very ill paid, and there is a want of a central depot for plant or engineering appliances. "Officers in charge of detached works of no very great extent cannot supply themselves with expensive appliances; but they would be very glad to avail themselves of such helps, could they procure them on loan, paying of course a reasonable amount for wear and tear and depreciation in value.

"By adopting some plan of this kind, Government would get their works better, more quickly, and more cheaply done, whilst the cost of the 'plant,' being paid for by the different works on which it might be used, would entail no extra expense on the State." The Superintending Engineer, Southern Provinces remarks on and praises highly Captain Kennedy's report. General Waddington also praises it, but considers some of the opinions crude, and ill considered. General Waddington does not believe that extra assistance would have saved money, considers that the low rate of labour is Captain Kennedy's own fault, he having the power to fix his own rates, and that all attempts at forming a central depot for "plant" have hitherto failed.

Poona.—On 22nd September, Mr. C. Gerrard, Acting Executive Engineer reports that he has surveyed the proposed Nassik Irrigation scheme. "A detailed report has been forwarded to the late Superintending Engineer, Colonel Scott, in which it will be observed that a very large extent of most valuable land can be irrigated from two reservoirs; one on the Godavery, about four miles west of Nassik, and another, west of a village called Bhagoo, situated about twelve miles south-west of Nassik. This reservoir is of vast extent, and capable of reserving as much water as will amply irrigate all the lands between the proposed canal and rivers Dharna and Godavery, as far as a village called Korhaley, about fifty miles south of the proposed reservoir. The Godavery reservoir is proposed to irrigate the lands south and

east of Nassik as far as a village called Wozur, there to be connected by the Bangunga, as well as a large portion of the lands between the rivers Dharna and Godavery." The lands are vast, and the revenue would be very large, the zemindars proposing an increased taxation of Rs. 5 an acre. Other works have been confined to "the annual repairs to roads and bridges, the building of the Poorundhur Hospital, the four large bridges over the Nassik Road, and sundry other petty works to bungalows, &c. In the whole Collectorate there are 356 miles 1 furlong 146 yards of road made, 103 miles 1 furlong 179 yards metalled, 252 miles 7 furlongs 187 yards moorumed." General Waddington noticing the report praises Mr. Gerrard's exertions, but cannot recommend him as the Engineer to carry them out. He would rather Captain Hart should be appointed to the special task of maturing this project, which originated with Captain Scott, the late Superintending Engineer.

Poona and Kirkee Cantonments.—On 8th April, Captain W. D. Graham, Acting Executive Engineer reports that the new European barracks have been suspended since 18th September, 1856, and that the married men's quarters added to the European barracks at Ghorpuree have been considerably advanced. Since the European Overseers went to Persia, the works have been entrusted to Native Surveyors who do very well. The Railway at present draws off almost all labour. The work is done by contractors and done well, but the contractors have lost confidence in the system. The expenditure of the year was Rs. 1,42,097. On 31st July, Lieutenant J. A. Fuller, Executive Engineer sends in a very minute report. Several rounds have been completed and other small works, and he proceeds to describe the dam across the Mokhana valley. "This dam was commenced on the 1st January, 1857, and it is nearly completed. The masonry portion is 168 feet long, and the discharge weir, which is 120 feet long, twenty-one feet in height at the centre of the valley; the weir at pavement is seven feet wide, interior side being perpendicular and the exterior having a batter of $\frac{1}{4}$. Each masonry wing is twelve feet high above the pavement of the weir. The sluice on the inner face is provided with cut stone pillars fifteen feet high, with grooves cut therein for the working of the gate, which when hoisted up, will remain suspended clear of the sluice. In order to ensure the dam being perfectly water-tight, an earthen backing (which is the fifth modification), three feet thick at the level of the pavement, and with a slope of 1 to 1, is to be erected against the masonry; it is now half up. The length of puddle dam in prolongation of one of the masonry wings is eighty feet, and it is now seven feet high. It is confidently expected that this work will be completed by the monsoon. A supple-

mentary estimate for Rs. 8,049 has been submitted for this work." Repairs of some extent are projected in the Bartoonda Dam, and the Agra road between Khurdee and Colsette repaired. It was in a dreadful state.

Nassik and Peint State.—On 15th June, Lieutenant A. W. H. Finch reports that the Agra and Bombay Road has been improved, tanks excavated, and wells sunk; only two places on this road remain unbridged, one, on the Kadwah, would cost 76,197 rupees, and a Railway bridge must speedily be built. The other, on the Godavery, might be bridged for half that sum and the bridge would be a benefit to Nassik. Of the cross roads the most important is the Nassik and Poonah road. The road is nearly made, but masonry works are still required. The works requisite to finish this road to Nandoor have been sanctioned. In irrigation works repairs only have been executed.

Ahmednugger.—On 6th July, Captain C. Scott, Acting Executive Engineer reports that few works of importance have been undertaken during the year, describes the repairs of roads, bridges and barracks, and believes that the work most requiring immediate attention is a road between Malligaum, and Ahmednuggur. The aqueducts in and about Nuggur also require to be renewed.

Candeish.—Captain H. W. B. Bell, Executive Engineer, reports (no date) certain detailed repairs to the roads and bundaras of the Collectorate. There is a bridge over the Girna nearly complete with 26 arches of 30 feet span. There were no new works commenced of great importance. There is a great want of labour, Candeish itself yielding no labourers at all, and the men from the Deccan often desert.

Surat and Broach.—On 26th June, Lieutenant J. E. Trevor, Acting Executive Engineer reports that the roads about Surat have received considerable attention. A Hard projecting into the river opposite Surat Castle and connected with Randier by a road has been sanctioned. It will cost Rs. 10,412. An embankment over the marshes between Dhollera and its port Khoon Bunder has been sanctioned. It will cost Rs. 5,000. The total expenditure of all kinds has been Rs. 1,45,249. The ports of Guzerat have a trade of five millions a year, but the only work completed for their benefit in the year is the Chaput Bunder Jetty at Surat: "which was completed at a cost of Rs. 8,499-8-1, and is formed of wood, with a roadway twenty feet in width with a length of 210 feet, and terminating in a flight of steps leading down to low-water mark." A floating pier at Broach has been in progress. A canal between the Taptee and Nerbudda for irrigation purposes has been projected and is now under the con-

sideration of Government. Rs. 4262-14-9 have been expended on lights and beacons in these ports. General Waddington in noticing the report says that in 1853-54 the exports and imports of the Guzerat ports amounted to only £3,400,000.

Ahmedabad and Kaira.—Captain C. Scott, Executive Engineer on 20th May, reports on several repairs of no particular importance. His works especially on the Gogo and Ahmedabad Road have been very cheaply done, owing to the use of a very simple barrel drain proposed by General Waddington. The new hospital at Ahmedabad is far advanced, and the waterworks of the same city have been completed. Colonel Goodfellow Superintending Engineer in transmitting the report observes that the roads are worse than they were for want of timely repairs, and the tanks are falling out of use. The province in his opinion has been neglected.

Deesa.—On 25th May, Captain A. H. Curtis, Executive Engineer reports on a new system. “In the office, the ledger and daily cash book have alone remained on their former footing, but regular receipt and issue accounts of stock and petty materials have been established; merchants delivering goods on the works have the same measured and certified to at once by the subordinates appointed for the purpose; lengthy nominal rolls of carpenters, masons, and labourers have been abolished as no longer necessary; irregular payments for broken periods to work-people are at an end; and the substitution of daily pay is a simple record compared with the original morning and evening roll-calls of people, many of whom would work for a week and return a month or forty days after for their wages. All the works are now measured up, and figured abstracts filled in daily.

“I have had unusual trouble with the operatives; it was only by the utmost conciliation they were persuaded to work on any other than their own most preposterous terms of commencing at 8 A. M., stopping at 4 P. M., having an hour’s rest at noon, and not being fined for short work: they all now come at 7 A. M., and are paid at 5 P. M. I have many bricklayers (inhabitants of Puttun) who can run up fifty feet of solid brick and lime, good masonry, well bounded and jointed throughout, in one day; whereas formerly from twenty to twenty-four cubic feet was an average day’s work.” The most important work has been in barracks for married Europeans which are thus described:—“The plan selected has of course been according to the instructions issued by the Honorable the Court of Directors, No. 187, dated 5th November, 1856, which allows each family one room 14’ x 16’ x 15’ under beam, and one verandah room 10’ x 14½’. Six blocks, containing each quarters for fourteen families, with a front verandah ten feet broad in the clear the full length,

are in course of construction, and will, I trust, be finished before the end of 1857. The foundations of five were lined out first of all, excavations of four are completed, and foundations and plinth of two are filled in and raised with burnt-brick and lime; and I hope before the end of June to have two completed if not altogether habitable." Other Military buildings have been completed. General Waddington in noticing the report remarks that daily payments succeed only when the Executive Engineer is not present. He remarks also on the married men's quarters:—"It is impossible not to be gratified with the description of the comfortable and nicely finished quarters which Captain Curtis describes and which he states that he has completed with a saving of 5 per cent. on the estimate. But I confess that I am as much alarmed as gratified when I look at the costly nature of the accommodation now thought necessary for an European of the humblest rank. These quarters have cost Rs. 18,062, or Rs. 1,389 for each family; and I have lately had occasion to notice that an estimate for married men's quarters at Ras Tarshayn, Aden, and not of the most durable kind, has nearly reached the sum of Rs. 2,000 for each married man. If the private soldier is to have such quarters as these, the next question is what description of quarters will Staff Serjeants, Warrant Officers, Apothecaries, and all those for whom quarters are provided by the State, have a right to demand. Certainly we cannot expect them to be satisfied with the accommodation hitherto prepared for them, and which nevertheless is very commonly quite as good as that which a Subaltern Commissioned Officer thinks, or used to think, sufficient." He considers that we have run from one extreme to the other, that the expense of accommodating Europeans has quite doubled within his (the General's) own experience.

On 5th December, the Governor in Council criticises the works. His Lordship discusses specially Capt. Kennedy's Report, holding that that officer's opinions are not crude and ill-considered, and quotes with approval the following paragraphs which were submitted by Captain Kennedy in order to prove that educated superintendence is synonymous with economy:—"An educated Engineer knows how to avail himself of all advantages of soil and feature, and, in the simple arrangement of details, is enabled to effect savings to a large amount. He can save money, for instance, by stepping the wing walls of a Bridge *up* a bank instead of sinking them *into* it, as most Overseers, and nearly all Maistries, would do; and as there are few cases in which all four wings of any given Bridge may not advantageously be made to differ in length and mean height,

according to the slopes and soil of the nulla banks up which they are built, on this item alone much can be either saved or uselessly expended. No average plan can be made to provide for the ever-varying circumstances of cases like these; each must be decided on and settled as it arises, both as to length, height, and splay, to fit the nullah and ground on which the Bridge or Drain is constructed. An educated Engineer knows where he may safely found his work, and, while carrying down his excavation to a reliable stratum, he will be able to judge when to stop, and will not, for the sake of extra and unnecessary security, involve himself in an amount of work which is not positively requisite. He will take care in his Road-work to calculate his cuttings so, that, as far as possible, they may balance his embankments; and will manage his details so, as to avail himself, to the utmost, of all favourable features. On Ghaut-works, the height of his section in rock, the nature of the rock itself in reference to the ease or difficulty with which it yields to the mining-bar, and its fitness for building purposes, will enable him to determine on the advisability of less or more retaining wall; and in this matter also, which requires no inconsiderable amount of a kind of judgment which few subordinates possess, is a most fruitful source of saving or expense. An educated Officer, a gentleman, exerts an influence over all under him, which an inferior subordinate can seldom possess; and his orders and directions are more likely to meet with the strict attention which the good of the work requires. Such an Officer is able to take in and comprehend the whole scope and bearing of what is before him, and is thus better able to make all work to one end: he is able on the numerous emergencies which must arise, and which no plans, estimates, or previous instructions can provide for, to act with judgment and promptitude; and, finally, there is hardly a point, no matter how minute, in a varied work of this description, on which a professionally educated Engineer, and a man of judgment and resource, cannot make his presence beneficially felt, and on which his eye is not wanted. This is more specially the case in this country, where, without the usual means and mechanical appliances, so much has to be done by 'make shifts.' His Lordship observes also that the style of "accommodation now sanctioned for European soldiers, has been strongly urged by Officers who have had daily opportunities of observing the requirements of such soldiers and their families, and has been adopted with the approval of the Government of India and the Honorable Court of Directors."

PUBLIC INSTRUCTION IN BENGAL.

1856-57.

ON 25th August, 1857, Mr. G. Young, Director of Public Instruction, submits to the Government of Bengal, his usual annual report for 1856-57.

During the year the scheme for the Calcutta University was matured, and in March the first examination of Candidates was held. There were 159 successful candidates of whom 113 were from Government Colleges, 42 from private institutions, and four privately educated. Six private Colleges have been affiliated to the University. The project for erecting a Presidency College has been stopped by want of funds. The Director is not desirous of seeing the project revived, as he contends that Government should rather aid private institutions than erect Government institutions.

There is he considers an embarrassing uncertainty as to the views of Government on this point, and so long as Government is believed not to contemplate the abolition of their own Schools, the Grant-in-Aid system must remain practically in abeyance. The case of the special Colleges, such as those of Medicine, Engineering, and Law is very different. Private enterprise can do little here, and Government must bear the expense.

The scholarship examination was conducted by the Revd. J. Mullens, B. A., H. Woodrow, M. A., Mr. R. Hand, Revd. K. M. Banerjea. The result was "that the greatest per-centage of students who obtained more than *half* the maximum number of marks for Scholarships was from the Presidency College, while Kishnaghur shows the highest per-centage of lads who got more than *one-third* marks. Again, we find that the highest *general average* of marks was gained by the students from Kishnaghur and the lowest by those from Dacca." This is creditable to the Mofussil Colleges who are yearly stripped of their best scholars by the Mofussil Bursaries, stipends paid to the best scholars in the Mofussil to enable them to finish their education in Calcutta. No students came up this year for honours, none remaining through their four years' course. The demand for educated labour is greater than the supply, and men get salaries after one or two years' instruction. The prospect of obtaining a degree may counteract this tendency.

The Medical College retains its reputation, but the Principalship is not on a satisfactory footing. The office was offered to seven gentlemen in succession who refused it, the emoluments being unequal to its responsibilities.

The Law Department of the Presidency College advances in popularity, and of the six students who completed their course every one received a diploma.

The allowance for Professors of Jurisprudence and Municipal Law has been altered to Rs. 1,000 a month for the two, and some changes have consequently taken place in the personnel.

The new College of Civil Engineering "was opened in November last, and its Registers show an average of attendance of thirty-one students." At the 2nd examination, in May only two candidates presented themselves. The College is unpopular, the students not seeing their way clearly to a career.

The Government Zillah Schools are well attended, popular and successful. Whenever in consequence of the increasing demand for English education the Schools become overcrowded, the fee is raised. The department does not encourage purely English Schools preferring Anglo-Vernacular institutions. The Court of Directors have declined to send out trained Masters for these Zillah Schools, till convinced that Masters cannot be obtained in the country. Certain School-masters deprived of employ in the North-west have therefore been engaged. Their services however have not been made permanently available. The control over these Schools hitherto exercised directly by the central office, has been transferred to the Inspectors. A Committee referred to in the last Report was of opinion that Schools like the Zillah Schools should not be aided unless English were taught simply as a language, the basis of instruction being the vernacular. These Schools are frequented by tradesmen, petty Talookdars, and Omlah and are injurious when they teach only a smattering of English.

"Four Normal Schools for the training of Vernacular Teachers, are now in operation at Hooghly, Dacca, Gowhattee, and Calcutta." They promise to be successful.

The Grant-in-Aid system is not only the most important portion of the plan inaugurated by the Despatch of July, 1854 but is its pivot. This system is not in a satisfactory position. On 25th September, 1856 the Director addressed to the Government a letter arguing that the fee fund should be considered part of the subscriptions. That fund is not public, and must therefore be considered private, and within the meaning of the private subscriptions. Indeed it is the best form of them, being less liable to fluctuation and discontinuance than any other. In a subsequent letter written in December, the Director quotes the opinions of his subordinates on the Grant-in-Aid and its failure. Mr. Pratt says, the failure is inevitable if Government adhere to the rules and restrictions laid down in its rules for Grants-in-Aid. Mr. Woodrow says of the 24-Pergunnahs. "In these Dis-

tricts Grants-in-Aid for Anglo-Vernacular Schools will probably succeed, but they have failed, and will utterly fail, for purely Vernacular Schools." Mr. Robinson says, the guarantee required before a Grant-in-Aid is given is an obstacle in the way. In Mr. Harrison's Division not one vernacular School has obtained a Grant-in-aid. Setting aside four Zillahs just around the capital, the average of aided Schools is only $1\frac{1}{4}$ in each district while in eighteen districts there is not one Vernacular School. "It appears to me, then, that the question simply is, whether the Grant-in-Aid system shall be abolished, and some other method of carrying out the orders of the Honorable Court in regard to the education of the masses substituted for it, or whether the Rules under which that system is at present administered shall be somewhat modified, in accordance with the experience we have gained since their promulgation a year and a half ago." The modification Mr. Young would seek is a relaxation of the Rules as applied to vernacular Schools, the maximum in no case exceeding three-fourths of the entire cost of the School. In these views the Lieutenant Governor generally concurred, and on 31st July, 1857 Mr. Secretary Beadon replies. The Governor General in Council sanctions an increase of expenditure for Grants-in-Aid up to Rs. 10,000 a month. The Government of India does not consider that any sufficient ground has been made out for a relaxation of the Rule about the Grants-in-Aid. "The Director of Public Instruction assumes that it is the *amount* required to be made good from local sources which prevents the people from taking greater advantage of the Grants-in-aid for Vernacular Schools. If so, the remedy consists, not in increasing the proportion contributed by the Government, but in diminishing the total cost of the School. At present it appears that no School is aided, unless the local contributions, including fees, amount to Rupees 10 a month, so that it is seriously contemplated to found a system of Village Schools costing at least Company's Rupees 40 a month each. It seems superfluous to point out the utter impracticability of such a scheme. In the North-West Provinces, the whole cost of a Hukabundee School is only Rupees 4 or 5 a month." To establish Vernacular Schools at the expense of the State is simply impossible. "The plain fact appears to be that, in the Lower Provinces, the lower classes have not yet learned to appreciate or desire Education, and that the higher classes generally are not actually desirous that their inferiors should be educated. All that the Government can do in such circumstances is to set before the people, in every way, the advantage of teaching their children to read and write, to exhort and persuade them to do so, to point the way by opening Normal and Model Schools,

and to aid in establishing Village Schools by a liberal grant of public money, the amount of which has been wisely limited as a general rule to a sum equal to that contributed from local sources over and above the very small fees paid by the pupils. To go beyond this limit would, in the opinion of the Governor General in Council, be consistent neither with the principle of encouraging private effort and combination, nor with a due regard to the public finances." Indeed the Government of Bengal seems rather to have fostered new and expensive Schools, than indigenous and cheap ones, an erroneous course on which the full opinion of the Lieutenant Governor is requested.

In reply the Director says that he did not propose Vernacular Schools on Rs. 40 a month, Rs. 20 being a maximum. What he meant by his proposal was "assuming Rupees 20 to be, as it is at present, the amount necessary to be made up, instead of the people being required to give Rupees 10, and the Government Rupees 10, the people might, (in certain cases, at the discretion of the Lieutenant Governor,) be asked for only Rupees 5, and the Government might give Rupees 15." As to the establishment of Vernacular Schools by Government being simply impossible, that must depend on the number of them. 600 would obviously be impossible, but six are sanctioned for each Zillah. As to the system of including fees as subscriptions it is important if only to prevent fraud. If it were abolished the fee would be reduced to the lowest conceivable coin, and the remainder presented as a fee in reality, but as a subscription in form.

The indigenous Schools even of the lowest character are not neglected, and as to Mr. Beadon's statement that a different system prevails under each Inspector, the differences—setting aside Behar—are not greater than are inevitable from extent and variety of country. The extent of jurisdiction for instance of the Director may be thus illustrated. A circle of the same extent having Paris as its centre would comprise "the whole of France, England, Belgium, Holland, and Switzerland, and parts of Ireland, Denmark, Austria, Italy, and Spain." His final request is that "Rupees 10,000 a month having been fixed upon as the maximum amount to be spent upon Grants-in-Aid, the discretionary power of the Lieutenant Governor may be enlarged to the extent of granting in each case such sum (and no more) as may be proved to be really necessary in aid of the funds of the School, provided that in no case shall the Government contribute more than three-fourths of the cost of any School, and that, as a general rule, no Grant-in-Aid School shall be set up within ten miles of another School of the same class."

Model Vernacular Schools have been established in thirteen

districts five to twelve in each, and they are in Bengal at least very flourishing. The system of circle Schools, or circles in which one Teacher travels about instructing the indigenous Teachers in their duties has succeeded. In each of the six districts of Behar two Teachers are thus employed.

The system of vernacular scholarships has been extended to fifteen more districts. Ten such scholarships are given annually, and in each district five of which are tenable for one year in a Normal School, and five for four years in a Zillah School. A number of free scholarships carrying a right of free education in a superior School have been sanctioned for Anglo-Vernacular Schools. In Behar model or circle Teachers are examined, and if necessary rewards given them. In Assam, a system is being tried by which for every Village Teacher, "who keeps up a tolerably efficient School, under the general control and influence of the Inspector, a subsidy or grant is given at the rate of one Rupee a month for every ten boys under instruction. Sufficient time has not yet been allowed for judging of the effect of this measure." A proposal to graduate the salaries of the Vernacular Masters in Assam, now universally Rs. 7 a month, was sanctioned by the Lieutenant Governor, but rejected by the Supreme Government. Each Deputy Inspector has been made an Agent of the School Book Society, in order to stimulate the sale of books in the interior. "About the beginning of the year under report, a newspaper in Bengalee, called the *Educational Gazette*, was established, under the editorial charge of the Reverend O'Brien Smith, under the auspices and patronage of this Department, assisted by a Government Grant of Rupees 200 a month. The object is to supply the people in the interior of the country with a newspaper cheap in price and healthy in tone. The plan has been very successful. The paper is very well conducted and popular, and its circulation, before it had been in existence a year, far exceeded that of any other Vernacular Paper" The following is the return of Schools which have received Grants-in-Aid up to 30th April, 1857 :—

*RETURN of Schools that have received Grants-in-Aid up to the
30th April, 1857.*

Names of Districts.	ENGLISH AID- ED SCHOOLS.			*ANGLO-VER- NACULAR AID- ED SCHOOLS.			VERNACULAR AIDED SCHOOLS.			REMARKS.
	Number.	Monthly Amount of Grant.	of	Number.	Monthly Amount of Grant.	of	Number.	Monthly Amount of Grant.	of	
Calcutta,	2	†800 0 0	2	37 0 0	0	† Including the Calcutta Industrial School.
24-Pergunnahs, ...	12	689 0 0	...	...	...	...	17	264 0 0	0
Serajunge,	1	60 0 0	...	...	...	...	...	...	...
Kanroop (Assam), ...	...	...	...	...	...	...	14	41 10 8	...
Howrah, ... ..	...	...	...	2	137 0 0	0	2	50 0 0	0
Raraset,	3	83 0 0	0	2	74 0 0	0	2	25 8 0	0	‡Including the Jonye Training School.
Hooghly,	9	450 0 0	0	11	†594 4 0	0	35	465 0 0	0	
Burdwan,	1	50 0 0	0	1	65 0 0	0	19	239 0 0	0	
Nuddeah,	0	...	...	7	270 0 0	0	19	269 0 0	0
Dacca,	5	165 0 0	0	3	68 0 0	0	3	122 8 0	0	
Patna,	1	200 0 0	
Midnapore,	1	82 0 0	0	1	73 0 0	0	9	90 0 0	0	
Rancoorah, ... ..	...	...	...	5	225 0 0	0	7	69 0 0	0
Scebsagur (Assam), ...	...	...	...	...	...	...	4	24 8 0	0
Sylhet, ... ..	...	...	...	2	31 0 0	0	...	...	...
Rungpore, ... ..	...	...	...	2	60 0 0	0	4	50 0 0	0
Chittagong,	1	40 0 0	0	...	...	...	...	...	...
Dinagopore, ... ..	...	...	...	...	...	...	1	10 0 0	0
Jessore,	3	192 0 0	0	...	...	...	2	42 0 0	0
Pubna,	2	105 0 0	0	...	...	...	1	11 0 0	0
Furreedpore, ... ..	...	...	...	2	37 0 0	0	5	73 0 0	0
Rackergunge,	3	77 0 0	0	1	20 0 0	0	1	15 0 0	0	
Rajeshyc, ... ..	...	...	...	...	...	...	1	22 0 0	0
Moorsheadabad, ... ..	...	...	...	...	...	...	2	29 0 0	0
Beerbhoom, ... ..	...	...	...	...	...	...	1	19 0 0	0
Total,	44	2993 0 0	0	39	1654 4 0	0	151	1968 2 8	0	

* An Anglo-Vernacular School is one in which English is taught as a language only, all other subjects being taught in the Vernacular.

Mr. Young expresses his sense of the valuable services of his subordinates and refers to the Rule that Inspectors must henceforward unless otherwise known to be proficient pass an examination in the Vernaculars.

The Appendices contain "Extracts from the periodical Reports of the Inspectors of Schools and Authorities in charge of Government Colleges and Schools.

"Selection of the more important Circulars, Notifications, &c. issued during the year.

"Reports and Papers connected with the scholarship and Honor Examinations of the year.

"Miscellaneous Statistical and Tabular Statements." Mr. Pratt, Inspector for South Bengal in his report for the quarter ending July, 1856 notices that the boys of the Krishnaghur and Berhampore Colleges do not like the new curriculum for the third and fourth years. They have learnt mathematics and classics till they will not learn physical science. He would teach them some, and argues, "why should Greeshchunder Chuckerbutty be expected to know 'what circumstances enabled Shakespeare to exhibit an accurate knowledge of Greek Mythology,' or 'in what respect the Dramatic compositions called 'Mysteries' differ from those called 'Moralities,' and other facts of a like nature? On the other hand, it is of very great importance, that he should see clearly the danger of living with an open sewer running under the lower floor of his house, or the cruelty of marrying his children at an immature age, or the impolicy of exhausting the soil of his fields by the disregard of important principles in Chemistry: and it is very important that his mind should comprehend the sublimity and beauty of the laws by which his own body and every thing around him are governed; and that his heart should, if possible, be awakened to the great facts and conclusions of Natural Theology." He presses the importance of a complete knowledge of Bengalee on the part of the Zillah School-masters. They are usually deficient in this. He would appoint to each Zillah School a Pundit on Rs. 20 a month. Mr. Pratt notices a number of Schools, and observes that the rich generally do not exert themselves to aid in the formation of Schools. He recommends that two copies of every Vernacular work published shall be sent to Government under a penalty. It is important to educationists to know what is doing in Vernacular literature, and there are at present no means. Efforts have been made to improve and extend the system of local libraries. At Krishnaghur the greatest interest was shewn in this work, and funds were subscribed in a few weeks sufficient to erect a building.

Mr. Woodrow, Inspector for East Bengal in his report for the

same quarter says, a steady improvement may be traced in the indigenous Vernacular Schools. The Gooroomhashoys are willing to improve their Schools, but even these are really attended by the better classes. Not one-tenth of the population ever attempt to learn to write. One-half the boys are Bramhuns or Kayasts. The citcle Teachers who receive Rs. 15 a month are examined once a month analyzing for instance twenty Chapters of a History of Bengal. They come to Calcutta for their salaries so the examination does not interrupt their studies, and they are thus compelled to improve themselves. In the Eastern districts there is apathy about education and antipathy to vernacular education. "The statistics of the Gurumohashoy circles in the 24-Pergunnahs and Baraset are as follows :—

46 Pundits.

133 Schools under improvement.

5,769 Boys in these Schools.

7 Schools in which girls are taught with the boys.

62 Girls in these Schools.

4,677 Books introduced by the Pundits.

112 Books previously in these Schools."

Mr. Harrison, Officiating Inspector in Behar says, that English education is slowly established. The Model Schools are much opposed. The average of attendance is 17 and of these eight-ninths are Hindoos. The Bettiah, Huttooh, and Doornraon Rajahs have promised to set up Schools open to Government inspection. Some other Zemindars have assisted, but in one place the ryots quitted the estate of one proprietor to go to another who promised not to trouble them with Schools. The Benares newspapers do not sell in the province, or many of the books. There is however a reason for this. The books are in Nagri. The people use the Kaithi, and though there is not much difference they are slow to change.

The examinations of Village Schools to reward the best Teachers have been far and unsuccessful. One Master who allowed his School to be examined refused a reward. The attendance next year will be better. Mr. Harrison reports favourably of the assistance he receives from his officers, from the Local Committees and from the Commissioners.

Pundit Eshwur Chunder Surma mentions that the Normal School had at the close of the quarter ninety-one pupils, and supplied fourteen Teachers.

Mr. Pratt in his report for the quarter ending October, 1856 deprecates the reduction in the number of aided Schools, which must follow the order that fees are not to be considered private contributions towards the Schools. The total number of aided Vernacular Schools in the Division established by 30th October was 90.

Mr. Woodrow in his report for the same quarter says he believes the indigenous Schools can be raised. In the 24-Pergunnahs there are sixty-six Schools. "Among all these Schools, there were only three which had any books at all last year, and these were only Lives of Krishna and Almanacs; now every one of them has books. Twelve Schools have classes reading Nitibodh and Bodhodoy. The plan of making girls eligible for reward as soon as they can read the Sheshushekhyā, No. I., and rewarding equally the Gurumohashoy who teaches them, has succeeded beyond expectation in certain places. At Sura there are thirteen girls in one School, in Neelgunge twelve in one School, and at Sydepore, near Barrackpore, I myself examined nineteen Brahmine girls—all of good parentage. Every Gurumohashoy has an interest now in bringing girls to his Schools, and they are doing so quietly and without any noise. I have now, in my Indigenous Schools more girls than there are in the Bethune and Central together, and before the end of the year, the number will be doubled." The people of the Eastern districts are much more bigoted, ignorant and prejudiced than those of the western; Grants-in-Aid for Anglo-Vernacular Schools may succeed, but must fail for Vernacular Schools.

Mr. Robinson in his report for the same quarter says the order restricting Government employment to those who can read and write has been fairly carried out in Assam, and with the best effect, grown men even learning to read.

Pundit Eshwur Chunder Surma mentions that the Normal School numbers 78 pupils and sent out 20 Teachers during the quarter. Mr. Pratt in his report for the quarter ending January, 1857 says the inhabitants of Midnapore have subscribed 200 Rs. for a Fives' Court in the School compound. He hopes the same thing may be attempted elsewhere as manliness and courage depend upon physical training. "The Gymnastic Lessons at the Hooghly and Presidency Colleges have not succeeded—probably because the students could see no practical use in the thing. But if a recommendation, which I made some time ago of teaching the lads the use of fire arms and horse-riding were adopted I think there would be no such reluctance. If the sons of our zemindars could acquire the habit of shooting snipe and dacoits, and of riding over their lands and seeing things with their own eyes instead of the eyes of their Omlah, it would be a decided improvement." Four applications had been sent in to establish Schools for girls. The inhabitants consented to Christian female Teachers, and to erect School houses, but did not propose to bear the current expenses. "The projectors make a considerable sacrifice, in exposing, themselves to annoyance and dislike on the part of a large section of their less enlightened neighbours; and

that sacrifice should be held at least as equivalent to a mere pecuniary donation." He was of opinion that the time had come for proposing the introduction of circle Schools into South Bengal, and therefore proposed :—

"List No. 1.

30 in Bancoorah at Rs. 25 per mensem,	750	0	0
30 in Midnapore,	750	0	0
30 in Hooghly,	750	0	0
30 in Nuddea,	750	0	0
30 in Burdwan,	750	0	0

List No. 2.

For the present, and to be extended hereafter when all the Thannahs have been visited :—

20 in Moorshedabad, at Rs. 25 each ..	500	0	0
20 in Malda,	500	0	0
20 in Rajshahye,	500	0	0
20 in Beerbhoom,	500	0	0

230	Total of Rupees per mensem,	5750	0	0
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"Supposing that on the average 200 boys are taught in each of the Circles, the formation of which has been recommended, the cost will be Rupees 5750 per mensem for the education of 45,000 boys, or an average of about two annas a head per month or Rupees 1-8-0 a year."

In his report for the same quarter Mr. Woodrow remarks that trained Teachers are wanted for the primary Schools. All the Inspectors, and the Governments of Bengal and India have sanctioned their employment, but the Court of Directors considered they could be trained in India. The Schools in Arracan are deficient from the inability of the Masters to speak Burmese. The boys too, owing to the great demand for English, do not stay long enough. There had been an application for an aided School from Sandoway, where though the district is 17 day's post from Calcutta there is a great desire for English. The Buddhist priests teach the people, and 70 per cent. of the population can read and write, but the priests being bound to poverty will not take a Grant in-Aid, nor will they teach secular learning. "The following is a summary of the Indigenous Schools now under improvement, in Baraset and the 24-Per-gunnahs :—

45 Pundits.
129 Schools under improvement.
4767 Boys in these Schools

10 Schools at which Girls attend.

26 Girls in these Schools.

5294 Books introduced by the Pundits.

"One of the Indigenous Schools under improvement at Dacca is taught by a Native widow. She is paid but once a year, and the highest gift is not more than one Rupee; the average is three annas. This gives just a pice a month. The attendance is about thirty."

Mr. Robinson complains that the English Schools in the Division teach only words. The students are not taught to think and they forget what they have learnt. The Division contained six aided Anglo Vernacular Schools with 382 scholars, the Normal School at Gowhatte worked well, and the Model Vernacular Schools in Bograh, Rungpore and Dinagepore had succeeded. They had 1053 scholars, a sign of progress, as in these districts not even a Gorumohashoy had ever been known. In Assam the Government Vernacular Schools had on the whole succeeded.

Pundit Eshwur Chunder Surma in his report for the same quarter mentions that the pupils in the Model Schools have made really surprising progress, having in eighteen months, commenced at the Alphabet and "gone through almost all the Class Books at present available; such as:—

Bornoporichoy, or Spelling Book.

Rijupat or Simple Lessons.

Kathamala, or Select Fables of Æsop.

Nitisar, or Moral Stories.

Bodhodoy, or Rudiments of Knowledge.

Pashawbali, or Animal Biography.

Charitabli, or Exemplary Biography.

Nitibodh, or Moral Class Book.

Bhugal Bibarun, or Geography.

Banglar Itihas, or History of Bengal.

Patiganit, or Arithmetic.

Charupat, or Useful and Entertaining Lessons on Miscellaneous Subjects.

Jeeban Charita or Biography."

The students of these Schools are seldom of the working class, but of the middle classes. The working classes cannot pay School fees, buy books and slates, &c.

Mr. Woodrow, Inspector for East Bengal in his Report for 1856-57 gives the following statistics:—"The Education Division of East Bengal contains a population of 76,53,000, and an area of 83,600 square miles, or 227 persons to each square mile. In this Division, exclusive of Calcutta there are under regular inspection—

12	Government	English Schools.
6	„	Vernacular Schools.
1	„	Normal School.
1	„	Model School.
2	Grant-in-Aid	Superior Schools.
34	„	Intermediate Schools.
31	„	Elementary Schools.
150	Indigenous Schools under improvement.	
<hr/>		
237	Total.”	

The English Schools are attended by 1,964 boys. The monthly cost is :—

				Total Cost.	vernment.
Barrackpore,	...	..	...	0 15 10	Nothing.
Baraset,	..	..	...	1 14 1	1 0 8
Jessore,	...	..	..	2 8 0	1 8 4
Pubna,	..	..	...	2 9 2	1 14 0
Burrisaul,	..	..	..	1 7 3	0 3 0
Furreedpore,	..	...	..	2 8 5	1 10 3
Noakhally,	..	..	..	4 9 0	3 10 6
Tipperah,	..	..	...	3 0 10	2 2 9
Chittagong,	..	...	..	2 5 0	1 5 7
Akyab,	...	..	..	4 5 0	4 0 6
Ramree,	..	..	...	4 5 0	3 15 11

Mr Woodrow details the condition of the Zillah Schools, and remarks that the tendency in all aided Schools is to attend exclusively to English because it pays. 150 Indigenous Schools were under improvement, they are taught by 53 Pundits with an average attendance of 5,784 boys and 59 girls. The improvement is extraordinary, some being equal to aided Schools.

On 23rd May, 1856, the Director of Public Instruction addressed a Circular to the Inspectors requesting reports on the sufficiency of measures in operation for promoting popular instruction. On 15th September, the Inspector for South Bengal replies :—“ In five Districts, containing an aggregate population of nearly six million souls, somewhat less than half the principal places have been visited and ‘ agitated,’ in number about nine hundred and thirty (930) ; and of these, only one hundred and twenty-four (124) or little more than thirteen per cent., have responded to our call.” The majority of the people are supremely indifferent, the ryots being too poor to pay for any instruction at all, the next class are content with the indigenous—the middle class care only for English education, and the Zemindars are either indifferent or opposed to education as weakening their own authority. The Schools established are usually in places where

some able Zemindar or Calcutta native has his home. These men understand the importance of education. The Inspector considers that education should be made more practical. If we made "provision for a better knowledge of Accounts, of Land Measurement, of Cutcherry work, of the Revenue Laws, of the art of writing Petitions and Law Documents, for lessons in Agricultural Chemistry, we should add immensely to the popularity of our Schools." Normal Schools are required, the combination of three or four Schools into a circle with a visiting Pundit, and a general cheapening of all School books.

On 6th September, the Inspector for East Bengal gives the following statistics of aided Schools :—

District.	ANGLO-VERNACULAR SCHOOLS.		VERNACULAR SCHOOLS.	
	Number	Amount of Grants.	Number.	Amount of Grants.
Calcutta,	1	200 0 0	2	32 0 0
24-Pergunnahs,	11	624 0 0	16	239 0 0
Baraset,	5	157 0 0	2	25 8 0
Burrisaul,	3	72 0 0	1	15 0 0
Furreedpore,	2	37 0 0	4	60 8 0
Dacca,	8	223 0 0	2	22 8 0
Pubna,	2	105 0 0	1	11 0 0
Jessore,	3	192 0 0	2	42 0 0
Total,	35	1610 0 0	30	447 8 0

138 indigenous Schools are under improvement.

Mr. Robinson, Inspector in Assam on 6th June states that the vernacular village Schools contain 3189 pupils. Thirty-six indigenous Schools have been established. In Sylhet, Bogra, Mymensing, Dinagepore and Rampore indigenous Schools scarcely exist. A beginning however has been made, and the people are not unwilling to learn English.

The Inspector of Behar reports on 25th July on the operations of his Division for the past year. In the ten Zillah Schools he remarks there are 1150 boys of whom 95 per cent. always attend. The standard of education is a little lower than in Bengal but not materially so.

Papers follow describing the condition of every College, and School throughout the country, official Circulars of the year, the report on the scholarship examinations, and statistics which may be thus condensed :—

STATISTICAL RETURN of Government Colleges and Collegiate Institutions in the Lower Provinces for the Year 1856-57.

Names of Institutions.	Town or Zillah within which situated.	Total number of pupils on the Roll at the end of the Year.	Total Cost of educating each pupil.	Cost to Government.
Presidency College—General Department, ...	Calcutta, ...	140	46 15 4	43 8 10
Kishnagur College, ..	Kishnagur, ...	20	36 2 3	33 6 6
Calcutta Madrassa—Arabic Department, ...	Calcutta, ...	101	16 1 6	15 11 9
Sanskrit College, ...	Ditto, ...	351	6 9 3	5 13 6
Berhampore College, ...	Berhampore, ..	11	84 6 6	83 4 3
Dacca College, ...	Dacca, ...	43	29 1 1	27 13 11
Hooghly College, ...	Chinsurah, ..	38	26 7 5	0 0 0
Arabic Department, ...	Ditto, ...	53	22 13 9	0 0 0
Patna High School, ...	Bankipore, ...	140	9 6 5	8 2 10

In calculating the charges, two-thirds of the Principal's pay have been reckoned as an expense of the College, the other third being divided between the College and the Collegiate School (which is also under the Principal's general charge,) in proportion to the number of pupils in each. The charges for Servants and Contingencies have been divided between the College and the Collegiate School, in proportion to the number of pupils in each.

ABSTRACT of Attendance at the Colleges and Schools in 1856-57.

	Number attending Colleges.	Number attending Superior Schools.	Number attending Inferior Schools.	Total.
General Education, { Government,	654	6,071	7,097	13,822
Private,*	No Returns.	816	11,603	12,424
Special Education, { Government,	402	258	None.	660
Private,*	No Returns.	No Returns.	No Returns.	.....
Total,	1,056	7,145	18,705	26,906

* Private Institutions, not receiving aid, objected to send Returns, and are consequently omitted in these Statements.

	Rs.
The Colleges cost in 1856-57,	8,48,670
The Superior Schools cost,	8,43,917
Inferior Schools cost,	1,41,687
Receipts in Colleges were,	3,50,421
In Superior Schools,	8,51,857
Inferior,	1,47,479
Aided Schools for General education received,	6,470
,, inferior Schools,	44,843
The total cost of all educational measures in the year was :—	

GENERAL STATEMENT of Amount expended by Government on education during the Year 1856-57.
(Compiled from the Accountant's Returns.)

	Salaries.	Scholarships, Stipends, and Prizes.	Building and Repairs.	Contingencies, Books, and House Rent.	Grants-in-Aid.	Total.
General Establishment,	1,45,207 5 1	.....	.....	19,331 8 4	.....	1,64,538 13 5
Govt. Colleges and Schools—						
General,	5,04,633 1. 4	27,568 5 11	2,221 9 4	58,548 8 8	.....	5,92,971 9 3
Special,	1,01,784 5 3	14,064 2 10	150 0 0	19,059 14 10	.....	1,35,058 6 11
Private Colleges and Schools—						
General, ... ..	.....	20 0 0	.....	.....	*43,936 5 3	43,956 5 3
Special,	6,700 0 0	.....	.....	.....	.....	6,700 0 0
Total,	7,58,324 11 8	41,652 8 2	2,371 9 4	96,939 15 10	43,936 5 3	9,43,225 2 10

* The Statistical Statements show the sum drawn by the Grant-in-Aid Schools to be Rupees 51,313-0-11. The difference, amounting to Rupees 7,376-11-8, is owing chiefly to the Schools entering the sum due for April, 1857, which the Accountant has excluded.

THE GUICOWAR'S HOSPITAL.

Indian Records, No. XXIV.

ON 27th February, 1857, Dr. J. B. Stratton, Residency Surgeon at Baroda, reports upon the Guicowar's Hospital. The Hospital during the past year has become better known and appreciated, especially among the pilgrims, who furnish the worst cases. As a rule few returning pilgrims ever make their appearance. The cases treated during the year were 2,862, of whom 837 were discharged cured, 1,131 discharged relieved, and 36 died. Of diseases the most common are "Periodic Fevers, Skin Diseases, Diseases of Stomach and Bowels, Diseases of Generative Organs, and Diseases of Organs of Respiration." There were only three cases of Fever. Of the 36 cases of death, 27 were in a state of exhaustion from exposure and want. Of the numbers admitted only 30 were female in-door patients, but there were 528 out-door female patients. In fever the Raswanti called in Bengal Rasot (Extract of berberies) has been used with satisfactory results. A gift of Rs. 200 from the Resident purchased two skeletons, a microscope of 4,00' worth £10 in England, and some Medical books.

Leprosy is very common in Baroda, and Dr. Stratton suggests a Leper's Asylum, and a Dispensary on the Southern side of the town. The Vaccine establishment contains sixteen Vaccinators who vaccinated 7,664 cases in the half year ending 31st December, 1856. The per-centage of successful cases was 77.5. Regular Peons for the Vaccinators are required, the villagers giving assistance unwillingly. Common medicines might be given to these Vaccinators with advantage. The establishment will soon be raised to 22 Vaccinators who with their establishment will cost, 541 Syacye Rupees or 473 Company's Rupees. This establishment is for the entire territory.

KAREN NEE.

Indian Records, No. XXIV.

"THE country inhabited by the race of Red Karens lies between the parallels of 0° to 20° N. Latitude and 97° to 99° E. Longitude. On its Southern extremity, it is bounded by a

mountain stream, called the 'Kai Mah'pee.' To the North a small stream, the 'Nau-pai,' forms the boundary between it and 'Levai-Loong,' a mountainous tract, subject to the authority of the Mobyay (Shan) Chief." The Een-lay-Yeea river bound it on the East and Poug Loung Ngay on the West. "Descending upon the central portion of Karen Nee from the Western range, at a height of 6,200 feet, the lower formations present the appearance of a country of widely arched undulations of low-altitude, enclosed between high ranges of mountains on its Southern and Eastern faces, and extending in unbroken wave-like lines to the horizon Northward; while the prospect to the West is closed by the subordinate ranges of mountain limestone, fractured on the sides and ridges into fantastic shapes of high-walled and battlemented forts, with turrets and gigantic buttresses in a state of ruin. Reaching the springing of the undulations, it is then ascertained that they have a higher altitude than was supposed when seen from above, and that the covering lines from gently sloping ranges of $\frac{1}{4}$ to $1\frac{1}{4}$ miles in breadth. These rounded hills occupy the Southern portion, or about one-third of the whole latitudinal surface of the country, and incline with graceful curvature to the Northward, until emerged in a vast plain, which extends from that point far into the Shan States." The range of this undulating surface is from 3,000 to 3,650 feet, and that of the plains 2,850 feet above the sea level. The entire country is cultivated, and the jungle has been extirpated. The formation is limestone, grey, hard, and compact, and at the Southern extremity tin deposits are worked, and copper ore and iron have been found. The area is probably 7,200 square miles. In the Western portion are 92 villages containing 7,360 houses, and 36,800 souls. The Eastern portion has 1,200 villages with 36,000 houses and 1,80,000 people. That gives 28 people to the square mile of whom one-third are slaves.

The thermometer when Mr. O'Riley was there varied from 55° to 70° on the undulations, and from 48° to 76° on the plains, and for the remainder of the year a blanket is always necessary. The rains are irregular, but usually last from mid June to October. There are no fogs and no miasmatic diseases, and the cholera has never visited the region. Cattle, buffaloes, and ponies are bred largely, and pigs and goats are plentiful. The latter are very fine. The only wild animal is the leopard. Hares, pheasants and partridges are common. The raspberry, strawberry and creeping pine will grow freely.

The inhabitants are called Red Karens from their clothes, and are supposed to have been seated on the Irrawaddy whence they were driven by the Burmese. They were hunted from

range to range till they reached Karen Nee whence they drove out the Shans. Thenceforward their position has defended them. The only government is that of the chiefs, to whom however they pay no taxes. Each head of a family acts as he likes, and all are armed. Thieves must restore the value stolen, or be sold to the Shans, but offences against the person are punished by fines. The people worship evil spirits, offering animals, but the only regular festival is the annual one. They all get drunk on these occasions. They use divination by fowl's bones. "Having killed a fowl and extracted the leg and wing bones, he next examines them minutely, to ascertain the number, position, and direction of the small apertures upon their surface. Into each hole he inserts a small piece of bamboo, to indicate its direction, and should they occur in certain forms considered favorable and in accordance with his own previously conceived result he is satisfied of the spirit's approbation, and his mind is relieved of all care for the future of his undertaking. But it more frequently occurs that the augury is unpropitious, as the small holes in the bones vary in almost every bird: in such cases, a second and a third fowl, or more, are killed, until the desired result is attained.

"In cases of death and burial also, no religious rites would appear to be observed; the body is conveyed silently to the last resting place of the race, a patch of jungle on the summit of a hill adjacent to the village being reserved for this purpose, where it is interred with a portion of the valuables of the family, implements of household use, and a supply of food, from time to time renewed. A small miniature house is erected over the grave, in which the articles are placed for the sustenance of the spirit during its mournful watch over the decomposition of the remains, which completed, and 'the body returned to the dust that made it,' the spirit departs to the world unknown."

Cultivation is very careful, and the soil, a rich loam, yields 15 to 20 fold. "The cereals usually planted are the red and white paddy, millet and *Kyeik* ('buck-wheat'), the two last being used principally in the manufacture of the fermented liquor *Koung Yai*, which usurps the place of water as their beverage." The exports are tin, teak, and stick-lac, of tin about 17,000 viss are exported yearly. The teak forests are becoming exhausted. The stick-lac yields about 140 tons a year. The only manufactures are rough clothes, and there are neither dyes nor drugs.

The only revenue is a tax on trade in transit producing to the chief about 1000 ticals of silver a year.

The people are in the last stage of barbarism, filthy, deceitful, and superstitious to a degree. They have however much family affection.

The country would serve excellently for a sanatorium, but though only 80 miles from Tounghoo the road is bad, and must be renewed. Even when cut wheel carriages could not ascend. "Next in importance to the restoration of health is that of its preservation and sustenance, and in this respect I may fearlessly hazard the opinion, that the whole country of 'Karen Nee,' with its plains of 2,500 to 2,800 feet, and higher uplands of 3,500 to 3,800 feet in altitude, possesses advantages in this respect not surpassed by any Territory of British India South of the Himalaya. I have elsewhere noticed the fine condition of the cattle and their abundance, and equally with the flocks of goats, sheep would here thrive uncared for; and potatoes, wheat, gram, and all the cereals and vegetables of useful economy find in this region a soil and climate extremely favorable to their culture. The country in our occupation would herein form the Depot from which to draw supplies for the whole Military Force employed in Pegu." Mr. O'Riley thinks the Cinchona might thrive.

The trade is confined to the Shans, and the timber dealers from Tenasserim, the former of which may be worth 13 lakhs a year. The timber trade is not less than 3 lakhs.

The slaves are either the children of debtors held in bondage to redeem unliquidated debts, or kidnapped children, and are sold to the Shans to the number of 2000 or 3000 a year. Sometimes whole villages are seized at once.

JUBBULPORE SCHOOL OF INDUSTRY.

Indian Records, No. XXIV.

ON 26th January, 1857 Major J. Sleeman, General Superintendent for the Suppression of Thuggee and Dacoity reports that manufactures are increasing and the conduct of the approvers satisfactory. One lad has shewn much aptitude for higher mathematics. The School at Lahore has succeeded, and the tent manufacture has been introduced. "The following articles have been manufactured in the Lahore School during the year:—

"Tents of different sizes,	...	...	...	...	9
"Table Cloths, ditto,	...	...	...	...	24
"Woollen Carpets, ditto,	..	...	...	...	3
"Kidderminster Carpeting, yards,	..	..	...	...	197
"Sutrunjees, ditto,	..	...	...	...	13

"Towels and Napkins, dozen,	64½
"The Sale Value of these articles amounts Co.'s Rs.	
to,	2,102 1 3
"Out of which has been paid for raw materials,	1,573 8 10
"And to hired work-men,	129 2 9
"Approvers and their sons,	42 13 0
"Leaving a balance in favour of the Institution of,	356 8 8

"The thirty-one sons of Thug approvers located at Meerut in 1850 are now working independent of Government advances, or of any assistance beyond that of the pay of an Overseer to write their letters, keep their accounts, &c. They are rapidly liquidating the debt due to Government for advances made when the Establishment was first formed, and in another twelve months, will be above the world, with a factory and Machinery of their own, and in a position to remunerate an Overseer of their own appointing." The total expense of the School for the year was Rs. 1,33,100. The receipts from goods sold were Rs. 1,04,851. The goods manufactured were

"401 Tents of sizes.	
301¾ Yards Brussels Carpeting.	
961 " Scotch Carpeting.	
4,559½ " Kidderminster Carpeting, of which 1,196 yards sold, the remaining 3,363½ yards were used up as Carpeting for Tents.	
350 Pieces Table Cloths of different sizes.	
212 Dozen " Napkins.	
145 " Bathing and Wash-hand Towels.	
15 Pieces Plaid.	
69 " Cotton Horse Clothing.	
3 " Woollen Horse ditto."	

THE THUGGEE DEPARTMENT.

IN 1856.

Indian Records, No. XXIV.

ON 20th March, Major J. Sleeman, the Superintendent reports "Forty-five Phansigar Thugs, fourteen Dhatooreea Thugs, and twenty-six Professional Dacoits, have been arrested by the Establishments in the Punjab during the year." No cases occurred there during the year. In Etawah Capt. Chamberlain

has arrested sixty-two of the Bhudoureea Dacoits of the Gwalior territory. Some of them have turned approvers, and if their leader Pretum can be caught the system will come to an end. Major Williams at Agra has been hunting the Meenah Dacoits of Ulwur and Rajpootana. He has seized and sentenced sixty-six, and the approvers have pointed out some seventy more. These Meenahs though not all Dacoits have a strong feeling of clanship, and protect one another. They follow any successful leader, and are considered by Colonel Sleeman essentially criminal, false and treacherous. They first took to Dacoity during the famine of 1833.

"The Establishment at Lucknow have been engaged throughout the year in a search for the fugitive Phansigar and Dhatooreea Thugs, supposed to be still at large in Oudh, and in carrying out a system of Patrols on the great thoroughfares, which has the effect of deterring the Budhuks, who still haunt the Turace, from leaving its fastnesses for the purpose of plunder." At Jubbulpore, Nagpore, and Indore the establishments have been hunting the Goar and Mooltanee Bunjarahs, men who by trade carriers never miss an opportunity of Dacoity. Lists of their Tandahs or camps were furnished to the Resident at Hyderabad, the Commissioners at Saugor, in Nagpore and the Nerbudda Territories, and the result has been a great diminution of their ravages. "The thirty-six Tandahs here alluded to have about 6,000 men attached to them, and of this number only 487 are denounced and registered Dacoits; but as every new approver names fresh men as his accomplices, we must conclude that there are hundreds of Dacoits among them yet unknown to us.

"The work in the Hyderabad Office has been greatly reduced since the cession of Berar from the 'Paidees,' 'Thakoonkars,' and 'Koolhatees' having in a great degree renounced their predatory habits and taken to tillage and other honest occupations."

The establishment at Belgaum have been employed to arrest Kaikargees, but the tribe have fled from their old haunts. A system of registration is to be applied to them. 113 dacoits have been arrested by the department during the year, and 2614 are supposed to be at large.

THE ANDAMANS.

Indian Records, No. XXIV.

ON 27th May, 1793 Lieutenant A. Blair reports on the survey of the Andamans. "Having, by your Lordship's order, engag-

ed some Artificers, Sepoys, and Laborers, and also provided the necessary Stores, I left Calcutta in the beginning of September, 1789, to form a small Settlement at the Port now termed in the Chart Old Harbour, with instructions to prosecute the Survey when the Vessels could be spared from the service of the Settlement. Soon after my arrival, I made a particular Survey of Old Harbour, a plan of which I had the honor to transmit to your Lordship from thence.

"On March the 20th, 1790, having left Lieutenant Wales in charge at the Settlement, I sailed with the *Ranger* and *Viper*, accompanied by Captain Kyd in the *Experiment* to prosecute the Survey, and with an intention to complete the circuit of the Andamans. Our route being from Old Harbour, up the East Coast of the Island, I shall observe the same progression in this Report." From the entrance of Old Harbour the land rises rather abruptly, to a great height, "a continuation of this, in a broken ridge, in the direction of North, and to an extent of 9 miles, very pointedly marks to the Navigator, the situation of Old Harbour." At the North extremity the ridge dips gently terminating in a double inlet too shallow for ships. Two miles N. of the second is Port Meadows, a small convenient harbour and 2 miles N. of this is the Eastern entrance of Middle Strait useless for ships of burthen. "Northward, from Middle Strait, there are great inequalities in the surface of the land, some parts low and others rising very abruptly and nearly insulated by the Sea. The direction is North East by North, but deeply indented with Bays and Inlets. The soundings are regular and no dangers without the depth of 10 Fathoms. The distance to Strait Island is 13 miles, the direction North East. Here the Archipelago contracts the breadth of Diligent Strait to three leagues, and from Strait Island to Round Hill (which is the narrowest part) the breadth is only one league." Here are the caves inhabited by the swallow which builds the edible nests of the Chinese. Lieutenant Blair believes these nests to be mineral formed of a mucilage exuding from the rock.

Strangers should not if possible enter Diligent Strait, but Lieutenant Blair gives directions for so doing. The Archipelago here appears to consist of eleven islands of various sizes all described. From the small Inlet in Latitude $12^{\circ} 29'$ to $12^{\circ} 45'$ the land rises very rapidly. It advances due N. then bends North North-East to Stewart Sound, then North and by East, where it rises abruptly into a high ridge called the Saddle. The North Peak is $1\frac{1}{2}$ miles from the South. The North Peak descends irregularly to the Southern part of Port Cornwallis. The entrance to this port is in Lat. $13^{\circ} 17'$ 2,500 yards broad. The harbour is excellent, the land in its vicinity abounds with

timber, and the soil and climate is that of the most happy tropical situation. Lieutenant Blair proceeds to describe the features of the coast, totally unintelligible without a plan. The natives are inveterately hostile to strangers but susceptible of the most tender impressions.

THE MADRAS RAILWAY FARES.

Madras Records, No. XLIII.

ON 19th March, 1857, the Consulting Engineer requests that as the scale of Fares on the Madras Railway is experimental, the Manager will submit his views on the classification to be adopted. On the 27th May, the Manager, Major T. A. Jenkins replies forwarding a Report from the Traffic Manager, and observes that the experience gained upon the line teaches them that "extremely low fares are in themselves not sufficient to ensure to the Railway the conveyance of all the traffic of the District to it; and it is confidently believed that an equal quantity of goods would have been conveyed had our rates been higher." He would recommend that the 1st class passenger fare remain untouched, that the 2nd class fare be reduced from nine pies to seven pies per mile, that the 3rd class fare be raised from four pies to five pies a mile. It is not proposed to make great changes but to reclassify the articles so that they may carry—

"In the 1st Class 300 lbs. one mile for 1 pie = $\frac{1}{12}$ of an Anna.

" 2nd " 240 " ditto.

" 3rd " 160 " ditto.

" 4th " 100 " ditto."

The enclosed letter from the Traffic Manager complains that the trains are too few, and inconveniently timed, that passengers cannot leave Madras and return the same day. He considers the difference of fares moreover excessive for "whilst upon this Railway the Second Class Fare is more than double the rate of the Third, and the First Class is double the rate charged for the Second, and more than four times that charged for the Third Class, the East Indian Railway Company's Tariff presents a still greater difference, the Second Class being thrice that of the Third, and the First Class double that of the Second, and six times that of the Third Class; and the Great Indian Peninsula Company's charges present a still wider difference, the Second Class being four times that of the Third, the First Class being one-half only more than the Second, but six times that of the Third." He would therefore increase the third class, now four pies

a mile, to five pies, reduce the second class to seven pies, and leave the first as it stands namely one anna six pies, "if the third class fare is continued at four pie per mile, that the second class should be lowered to six pie, the first class remaining as at present, *viz.*, one anna six pie per mile."

The rates in force for parcels have been :—

Weight.	Distance.			Distance.		
	50 miles and under.			Exceeding 50 and less than 100 miles.		
5 Seers and under,	0	8	0	0	12	0
Exceeding 5 Seers and less than 20,	0	12	0	1	2	0

The rates are prohibitory, the banghy post, and the goods' train being preferred to the passenger train at the parcel rate. Both are very much cheaper, a parcel not exceeding 8 lbs. costing by parcel's rate 12 annas, by banghy 4, and by goods' train 8 annas 7 pie. The banghy post is forwarded by train. He would suggest :—

Distances.	Parcels.																		
	7 lbs. & under.		14 lbs. & under.		28 lbs. & under.		42 lbs. & under.		56 lbs. & under.		84 lbs. & under.		112 lbs. & under.		140 lbs. & under.		Every 28 lbs. or fractional part.		
	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	A.	P.	
15 Miles & under,	2	0	4	0	4	6	5	0	5	6	6	6	0	7	6	0	9	0	10
25 " "	2	0	4	6	5	0	6	0	7	0	8	6	0	10	0	12	6	1	0
50 " "	2	0	5	0	6	0	7	6	9	0	11	0	0	13	0	1	0	1	6
75 " "	2	0	6	0	7	0	9	0	11	0	14	0	0	1	0	1	6	1	9
100 " "	2	0	7	0	8	6	10	0	13	0	1	0	1	1	0	1	0	2	0

Mr. Fletcher would also reclassify the goods, placing in the first or cheapest class goods not requiring cover, second agricultural produce, third manufactured articles, and fourth goods seldom carried ; at the annexed rates :—

" First Class 8 pie per Ton per mile = 293 per maund per mile.

Second do. 10 do. do. 367 "

Third do. 15 do. do. 551 "

Fourth do. 24 do. do. 881 "

with 50 per cent. upon the weight upon light articles specified." He would abolish the terminal charge, which is too high for short distances and imperceptible on long ones. Mr. Fletcher

considers that the want of a system for the collection and delivery of goods is the great drawback on the prosperity of the Railway. Mixed trains also of goods and passengers would be popular, as native merchants like to accompany their goods. Roads also are greatly wanted to the stations. The mode of calculation also by the standard maund is very inconvenient as it introduces fractions into the village rates. He would prefer the ton or a decimal system.

On 22nd May, 1827 the Consulting Engineer reviews the correspondence. He would lower all the rates. As a rule the Railway has failed to attract any but a high class of passengers, the number of passengers between 1st July and 31st December, 1856 having been 165 per diem from Madras and 133 from Arcot. Thousands travel between Madras and Trevellor, a station, on foot and in bandies, the Rail with its charge of 4 pies a mile for the third class being too dear. Colonel Pears does not believe the time bill or the want of mixed trains to be of importance, for on festival days the Railway meets all requirements except cheapness, and still the people walk. To raise the third class fare and lower the second is he thinks "to see the people starving, and as a remedy to raise the price of bread, and look to the development of a traffic in sandwiches." Colonel Pears enters into arguments to prove that the second and first class have an amount of room, and an expense of carriage proportioned to their increased fares. "Mr. Fletcher hopes to induce some of the lowest class to ascend to the higher, no easy matter, though the difference be but 2 pies. He forgets that the difference in the profit gained from the few, who thus forsake the 3rd for the 2nd, will not be worth the paper that we are expending in discussing it; that the rise in the rate of the 3rd class will certainly expel a certain number from the line altogether; and that, as it is certain the 2nd class has already been patronised by many, who, he, trusted, would take the 1st, a fall in the 2nd class rate will not diminish its attractions." The rates are too high being as compared with English rates and English wages just three times as great. "On a review of the operations of the last 11 months, and upon the principles which I have here, and elsewhere, advocated, I propose a revision of the present rates, and the adoption of the following :—

1st class 2nd class 3rd class 4th class with goods.

A.	P.	A.	P.	A.	P.	A.	P.
1	0	0	7	0	3	0	1½

or if the low rate for the slow train is still objected to, I would propose :—

1st class		2nd class		3rd class	
A.	P.	A.	P.	A.	P.
1	0	0	6	0	2

Even as it is the cost of a third class passenger is only 1.25 pies a mile, while if each carriage built for sixty received even 49 the cost would fall to 0.913 pies a mile. The rate proposed therefore would pay. Colonel Pears agrees that the charge for parcels is too high. He thinks the classification proposed though not very expedient, not very objectionable, but utterly objects to the Railway undertaking the business of delivery and collection. "The fact is, the common carts can carry at a marvellously cheap rate. There can be no question but that at this moment good carts, carrying 15 Indian maunds at least, can be got to work from Vellore to Madras for 4 Rupees, or even $3\frac{1}{2}$ Rupees, returning with a load of salt for 2 or $2\frac{1}{2}$ Rupees. Taking $6\frac{1}{2}$ Rupees for the double journey, we have 15 maunds carried 168 miles at a cost of $6\frac{1}{2}$ Rupees, being an average charge of less than $\frac{1}{2}$ of a pie per maund per mile, or less than 1 A. 2 P. per ton per mile, including 'collection and delivery.' All depends on cheapness. The rates will be low enough when long distances are opened, and all Colonel Pears would recommend for the present is to strike off the terminal charge. All raw produce should be carried as cheaply as possible and the following observed as a principle:—"That it is to the interest of the Railway Proprietors, of the Government, and of the people, that these Railways should do the work of the country—that all attempts to lead or drive the people to take only the accommodation the Managers choose to give them, something different from what they want, are unsound in principle; and that, consequently all efforts directed thus to the development of high classes, while the mass of the people are not carried, are empirical and vain. If, therefore, we find that the mass of the people prefer travelling slow—crowded and cheap—to quick—with more accommodation and at a higher charge, we should make arrangements to enable them to do so. It is to the interest of the Railway to provide, as near as possible, what the people want."

The Appendices contain Colonel Pear's system for the analysis of the cost of each unit of work, and these tables:—

APPENDIX A.

MADRAS RAILWAY.

PASSENGER'S TRAFFIC.

Open 65 Miles from Madras to Arcot.

Revenue Account (Three Months) from 1st Oct. to 31st Dec. 1856.

PAYMENTS.							
To Locomotive Department—Salary of Superintendent and Office expenses,	580	4	8				
Foremen, Enginemmen, and Firemen's Wages,...	1,604	14	6				
Wages of Laborers, Cleaners, &c.,	225	9	1				
Coke and Coal consumed,	2,584	11	11				
Oil, Tallow, Waste, &c.,... ..	287	12	9				
Materials for repairs of Engines and Tenders,	267	13	9				
Wages for do.,	453	3	8				
						6,001	6 4
REPAIRS OF CARRIAGES AND WAGGONS.							
Superintendence,	63	2	7				
Wages,	237	9	6				
Stores,	215	6	11				
						516	3 0
TO TRAFFIC DEPARTMENT.							
Salaries of Traffic Manager and Assistant Station Masters and Clerks,	4,038	1	7				
„ of Guards,	261	14	2				
Wages of Porters, Greasemen, &c.,	1,222	14	1				
„ of Gatemen, Pointsmen, &c.,	509	9	0				
Cost of Tallow, Grease, and Waste,	172	6	0				
„ of Oil, in lighting Stations and Signals, and for the use of Pointsmen, &c.,	271	12	0				
„ of Tickets issued,	28	7	6				
Advertising, Printing, and Stationery,... ..	839	1	8				
Cost of Stores not otherwise classified,... ..	47	6	4				
Travelling expenses and allowances,	199	13	4				
Contingent Charges and Petty Disbursements,	4	4	8				
						7,598	10 4
TO GENERAL CHARGES.							
Agent and Manager, Cashier, Audit and Accountant and Office expenses,						*2,445	10 4
Total Expenditure,						16,564	14 0
Receipts for three months,						37,036	5 11
Profit, Rupees,						20,471	7 11

(Signed) T. T. PEARS,

Consulting Engineer for Railways.

* The total expenditure is Rupees 3,668-7-5, of which some one-third has been charged to Goods and two-thirds to Passengers, in accordance with the arrangement adopted by the Agent and Manager in the Half-yearly Revenue Account.

APPENDIX F.

MADRAS RAILWAY.

GOODS' TRAFFIC.

*Open 65 miles from Madras to Arcot.**Revenue Account (Three months) from 1st October to 1st Dec. 1856.*

" PAYMENTS."				Rs.	A.	P.	Rs.	A.	P.
To Locomotive Department.—Salary of Superintendent and Office expenses, ...				876	1	0			
Foremen, Enginemen, and Firemen's wages, ...				2,194	8	4			
Wages of Laborers, Cleaners, &c., ...				297	7	2			
Coke and Coal consumed, ...				4,144	6	4			
Oil, Tallow, Waste, &c., ...				293	2	11			
Materials for repairs of Engines and Tenders, ...				421	11	0			
Wages for do. ...				951	14	10			
							9,179	3	7
REPAIRS OF CARRIAGES AND WAGGONS.									
Superintendence, ...				103	6	5			
Wages, ...				401	14	0			
Stores, ...				330	11	5			
							838	15	10
TO TRAFFIC DEPARTMENT.									
Salaries of Traffic Manager and Assistant Station Masters and Clerks, ...				2,019	0	9			
Salaries of Guards, ...				449	11	4			
Wages of Porters, Greasemen, &c., ...				1,270	9	10			
,, of Gatemen, Pointsmen, &c., ...				376	0	2			
Cost of Tallow, Grease, and Waste, ...				2,277	0	0			
,, of Oil in lighting Stations and Signals, and for the use of Pointsmen, &c., ...				135	14	0			
Advertising, Printing, and Stationery, ...				419	8	8			
Cost of Stores not otherwise classified, ...				23	11	2			
Travelling expenses and allowances, ...				99	14	8			
Contingent Charges and Petty Disbursements, ...				2	2	4			
							7,073	8	11
TO GENERAL CHARGES.									
Agent and Manager, Cashier, Audit and Accountant, and Office and Expenses, ...							1,222	13	1
Total Expenditure, ...							18,314	9	5
Receipts for three months, ...							34,141	2	5
Profit, Rupees, ...							15,826	9	0

T. T. PEARS,

Consulting Engineer for Railways.

Appendix B contains a memorandum from certain native merchants of Vellore, proposing separate carriages for males and females, and for the higher and lower castes, and a reduction of fares in all three classes to one anna six pies, and two pies a mile respectively. They request also a reclassification of goods.

A long correspondence follows on the mode of charging for cotton. The charge was up to 31st January, $\frac{1}{4}$ of a pie for every three cubic feet per mile. The natives would not send it at that rate. The Traffic Manager therefore carried the cotton a dead weight at Rs. 5-1-8 per ton, or half a pie per mile per maund. The quantity rose in December to 5,044 maunds. Government in reply on 5th February object to give up the principle of carrying measurement goods by measurement, object to double the permanent charge for cotton, and suggest a special and cheaper measurement for that loosely packed article. Mr. Fletcher in reply on 17th March adheres to his opinion, arguing that the special measurement would be unintelligible, and his system is a reduction in practice of fifty per cent., and has induced merchants to send their cotton. The question is referred to the Court of Directors.

MINERAL DISTRICTS OF THE NERBUDDA VALLEY.

Bombay Records, No. XLIV.

ON 10th June, J. H. Blackwell, Coal Viewer, reports on the iron and coal districts of the Nerbudda to the Government of Bombay. He had been engaged in the examination for four months. The mineral district extends from Baug to Jubbulpoor, a distance of 350 miles. The valley through this course varies from 20 to 50 miles in width, and is bounded by the Vindhya on the North, and the Satpoora, and Punchmurry Hills on the South. The whole valley and hill is covered with jungle, but in the valley there are large tracts of cultivated soil. The upper part of the valley is level, cultivated, full of population, and under British rule. The lower part is chiefly in native hands. The Nerbudda can hardly be said to be navigable, in any part, and "the only made roads are, one from Bombay to Agra, which crosses the lower part of the valley, and a road from Indore through Burwai to Asserghur; but even the Agra road is impassable for loaded carts during the rains." There are country

fair weather roads in every direction. From Jubbulpore there is a first class road to Mirzapore, and the Great Indian Peninsula Railway will traverse the entire valley. "The coal measures extend along the southern side of the valley, with some interruptions, from Baitool and Sewnie to the neighbourhood of Jubbulpore. They consist of a series of slightly micaceous sandstones, shales, and coal-seams, and are quite destitute of iron ore. They form a long narrow strip, resembling an old sea-beach, extending along the base of the Punchmurry Hills." The coal is of no great area, being overlaid by an unconformable series of rocks. It is probable that the field is of little value compared with that of Bengal. It possesses however limestone near the ore, which the Bengal field does not.

Iron has been found at

Baug	...	...	Brown iron ore or limonite.
Burwa,	...	...	Ditto and compact hematite.
Baitool,	...	...	Ditto.
Chandghur,	...	...	Compact hematite.
Towah River,	...	...	Ditto ditto.
Machuck River,	...	...	Brown ore and compact hematite.
Tendukera,	...	...	Calcareous hematite.
Mutnapoor,	...	...	Silicious hydrate.
Ladgaum,	...	...	Brown ore or limonite.
Dhurumpoorah	...	...	Micaceous specular ore.
Agaria,	...	...	Ditto ditto.
Purtalghur,	...	...	Ditto ditto.
Jowli,	...	...	Ditto ditto."

Baug is a place in Holkar's territory, sixty miles west of Mundlairsir and twenty miles north of the Nerbudda. The rocks form two distinct formations, the upper series consisting of soft thick bedded yellow sandstone similar in appearance to the Paris sandstone, hard dark slaty shales, and a highly fossiliferous limestone. The lower series consist of "hard quartzose sandstone; metamorphic schists; hard grey crystalline limestone." Iron is found in the sandstone in mineral lodes or veins, and has formerly been largely worked. It is now abandoned. In one of the old shafts 52 feet depth, the working is evidently a large vein perhaps fifteen feet thick. "The ore is a hydrated peroxide of iron, and belongs to the class of ores called brown ores or limonites. The greater part is soft and friable, of a yellowish brown colour, in which are interspersed masses and strings of hard dark brown ore. It would yield upon an average about thirty-five per cent. of iron. The ore is not practically a good one: the per-centage of iron is rather low; and, being silicious, it would require more fuel and limestone in smelting than an

argillaceous or calcareous ore of the same richness. The quantity existing is very considerable, and if properly worked it might be raised at a small cost." Grey crystalline limestone is found close to the ore. There is no coal, and the supply of wood is thin, but extends over a large area. It is not in the Viewer's opinion a good place to begin operations.

Burwai is a good sized town, 28 miles East of Mundlaisir, and 4 from the river. "A made road runs from Indore through Burwai to Asceerghur, crossing the Great Indian Peninsula Railway Company's proposed line at sixty-five miles from Burwai, and thus rendering the mines accessible." A great deal of ore has been found, especially at a village called Nandia where a large vein ten feet deep has been worked. Similar ore is seen at other points, other ores are found at Korundia 4 miles from Burwai and at Chictce Modree 5 miles from Burwai and Kurrumpoor a six miles all worked but abandoned under the competition of English iron ore. Near Burwai there is a good fire clay, light grey limestone, and a boundless jungle. It is a good place for a charcoal iron work.

There is ore at Kaiteote but valueless, and at Chandghur, and its neighbourhood. At Bamber there is ore but not very rich, and very refractory to smelt. There are deposits at Cartsa Byrow on the Towah, at Makeraban, Muchuck, Lemekaira and Kirmin but they are of no practical value, as there is no fuel. No further ore is found till we reach Tendukea 150 miles further up the valley.

Two miles from that place at Oomcrpani is a very large vein in the limestone of the schist formation. It has been largely worked, the ore being obtained from a depth of from thirty to forty feet. There is undoubtedly a very large quantity of ore of excellent quality containing 40 per cent. of iron; it is "a calcareous ore, somewhat similar to the forest of Dean ores worked in the mountain limestone of Gloucestershire." It would contain its own flux and is particularly easy to smelt. It is near coal, the best seams in the valley being at Mopani 30 miles away. There are from 70 to 80 furnaces here and the iron which is of two qualities is very good. The iron is cheaper than English iron. The quantity burned out is about 25 tons per week during 8 months. All the works stop in the rains. "It was at Tendukera that Captain Franklin some thirty years ago manufactured by the native method sufficient iron for the construction of a suspension bridge." The ores at Hutnapoor, Ladgaum are of no practical value, but the mine at Dhurrumpoor, 10 miles from Jubbulpoor is valuable. It yields to native processes 50 per cent. of iron. The nearest limestone is five miles away. At Agaria, 20 miles North East

of Jubbulpoor are the shafts sunk by Messrs. Hunt and Ellsley. The ore here is very rich yielding 60 per cent. of iron. At Jowli, 12 miles further there is a similar ore, and these two places are for the richest. The ore can be obtained cheaply, but the flux is at some distance. There is no coal but wood could be obtained from the jungle in large quantities. "There would be less difficulty in transporting machinery to these mines than to any others in the valley."

Coal is found at Sonadeh, Sucker River, Mopani, Sher River, Lemata Ghaut. The first two the Viewer did not see. At Mopani, the coal is in a good position, and the Railway will run within ten miles of it. There are three beds, the upper one "9 feet 6 inches thick, and of very good quality. In the lower part of it there are one or two thin layers of inferior coal, but with this exception it is uniformly good. The second bed is 3 feet 6 inches thick, and of the same quality as the first. The third bed is 6 feet thick, and of inferior quality; about 2 feet 9 inches in the centre being good coal, but the top and bottom very poor." The coal makes a fair coke, and would do for iron processes, except for smelting. The extent of the coal is unfortunately uncertain, but the Viewer believes it as certain as anything without positive proof can be that there is a great quantity of coal.

On the Sher river the coal is too thin to be of practical value, and at Lemata Ghaut the coal is very poor.

Mr. Blackwell considers the coal of the Nerbudda less in extent than its iron, and proceeds therefore to calculate how far the jungle can supply the deficiency. "A European forest yields from $6\frac{1}{2}$ to 12 tons of kiln-dried wood per acre, averaging 8 tons, and being cut once in eight years will yield a continuous supply of 1 ton per acre per annum. As well dried hard wood yields 25 per cent. of charcoal, this is equivalent to 5 cwt. of charcoal per acre, or 160 tons per square mile per annum." Indian jungle will yield as much, and from the low price of carriage and other causes each factory may rely on supplies from 1,200 square miles of jungle. "Now if this twelve hundred square miles of jungle yielded one-fourth of the estimated produce of a European forest, or 40 tons of charcoal per square mile, instead of 160, we should have a continuous supply of 48,000 tons per annum, which at 3 tons of charcoal per ton of wrought-iron would be sufficient for a yearly make of 16,000 tons of iron, or 300 tons per week." Mr. Blackwell considers Mopani and Agraria the places for iron works, but would erect experimental works at Burwai. "The expense of erection of the machinery already sanctioned would not be greater at Burai than at Mundlaisir, and the additional erections and machinery that I pro-

pose would cost from £800 to £1,000." A few months' working would soon shew its value. Coal could be brought in from Mopani on a tramway and the cost would be "if this plan were followed, to make say 250 tons of wrought-iron per week as follows:—

<i>Charcoal Work at Tendukera</i> , for the production of 60 tons of pig-iron per week, inclusive of foundry, small rolling-mill, fitting shop, &c., ...	£6,000
<i>Large Work at Mopani</i> , to consist of six charcoal blast-furnaces, capable of making 40 tons per week each, or 240 tons per week in all, and mill and forge for the conversion of 300 tons of pig into wrought-iron,	34,000
<i>Tramway</i> , ten miles, at £2,000 per mile, ...	20,000
„ twenty miles, at £1,000 per mile, ...	20,000
Total,	£80,000"

The time required would be three years, as workmen must be collected and trained. The iron would be produced at £6 per ton while English iron on the spot is costing £12. Mr. Blackwell is of opinion that natives could do all the work, though of course greater numbers would be required than of Europeans. He has no doubt that iron can be made in this district cheaper than it can be imported.

THE HIMALAYAS.

Bengal Records, No. XXVII.

ON 1st December, 1831 Mr. B. H. Hodgson, Officiating Resident, Nepal, transmitted certain papers on the commerce of Nepal. Mr. Hodgson would not recur to the old mode of increasing our commerce by arms, and diplomacy, but thinks there is too evident a tendency to neglect the subject altogether. Formerly there was a great trade between the Cis and Trans-Himalayan countries. All records are lost, and Mr. Hodgson put his calculations on record in order to avoid a similar calamity for the future. He has formed his conjectural estimates of the trade after consultation with the merchants of Kathmandu. The imports amount to Rs. 16,11,000 and the exports to Rs. 10,64,833 of Kuldar rupees making the total movement of trade, 26,75,833 Kuldar rupees. This is about a lakh of rupees in excess of the average, the Durbar having made some extraordinary purchases of horses, guns, vehicles, and kinkhabs. This agrees

with a calculation of *twenty-five lakhs a year, as the average* trade, framed from returns of duties and articles *exempted from* duty. The duties on the Northern Branch of this trade are *not* known, but on the Southern Branch they amount to 1,60,364 *Nepalese* rupees.

To understand the trade which might be made to *spring up*, we must examine the Russian trade with China. The distance from Petersburg to Pekin is 5,500 miles, and the water passage takes three years, and the land route one year, while the Russian Government levies on all foreign articles in the trade from 20 to 25 per cent. "The Russians export to China, peltry, woolen and cotton cloths, glass-ware, hard-ware, hides, and prepared leather. Russia imports from China, musk, borax, rhubarb, tea, raw and wrought silk, ditto ditto cotton, porcelain, japan-ware, water colors, &c. But the best musk, borax and rhubarb by far are those of Tibet, and especially of Sifan, the North-Eastern Province of Tibet; and no tea is better or more abundant than that of Setchuen, which Province is only eighty-seven days' journey from Kathmandu; whilst, of course, the musk, borax and rhubarb regions (as above indicated) are yet nearer to us, yet more inaccessible to the Russians, than Setchuen."

From Calcutta to Pekin is 2880 miles, the first 540 of which are from Calcutta to Kathmandu. Of this section two-thirds are covered by a navigable river. The merchant from Kathmandu may easily reach Pekin in five months. "But wherefore speak of Pekin? At the eighty-seventh stage only, from Kathmandu, the merchant enters that rich and actively commercial province of China Proper, called Setchuen, whence, by means of the Yangtse-kiang, and of the Hoangho, he may transport his wares, as readily as cheaply, throughout the whole Central and Northern parts of China, if he can be supposed to have any adequate motive for going beyond the capital of Setchuen, where he may sell his European and Indian products, and purchase tea or silk or other products of China. The mountains of Sifan and of Tibet, which yield the finest borax, musk and rhubarb in the world, lie in his way both to and fro; and, in a word, without deviating from his immediate course, or proceeding above ninety days' journey from Kathmandu, he may procure where they grow, or are wrought, all those valuable articles of commerce which Russia must seek indirectly and at a much greater cost." Only information is needed for the trade to spring up.

Detailed reports of which the above abstract is a summary are annexed.

The Trade of Nepal.—Lakhs of people from the plains now attend the Nepalese festival of Pasupati Kshetra at Kathmandu,

and although Europeans not attached to the Residency cannot penetrate into the interior, natives can. The Calcutta merchant must first reach Govindgunge on the Gandak in Sarun by water, then convey his wares by bullocks to the base of the hills, then take bearers to Kathmandu. "The total expenses, therefore, per bullock, from Kesriah to Hitounda, are Sicca Rupees 3-6-0. The load of each bullock is four pukka maunds. The stages are nine, as follows:—Kesriah to Bhopatpoor, 5 cos; to Lohia, 7 cos; to Segoulee, 5 cos; to Amodahi, 5 cos; to Pursoni, 6 cos; to Bisouliah or Simrabasa, 4 cos; to Bichiako 5 cos; to Chooriah Ghauti, 3 cos; and to Hitounda, 4 cos; being 44 cos in all." From this point the expense is:—

	<i>Nepalese Rs.</i>			<i>Siccas.</i>		
Hire of Porters.	4	0	0	3	4	0½
Duties, Paise Rs., 1 12 0	3	12	8	3	0	9½
Per bullock load,	7	12	8	6	4	9½

At Kathmandu, a final duty is paid of 3-8 per cent. Nepalese rupees or 2-13-6 Sicca per cent.* Here the merchant will get cent. per cent. for his European goods if well selected. The value of the goods is settled by the invoice, and appraisement of the custom house officer. One or two articles are more highly taxed.

	<i>Rs.</i>		
Indian Groceries,	4	1	
Peltry,	4	1	
Quick-silver and drugs,	4	1	
Indigo (in kind,)	8	2	
Precious stones,	1	3	6
Indian lace,	4	1	

The Export duty usually amounts to 4-11-1 per cent. Gold however is duty free, silver is prohibited, and ponies are taxed at 7 Nepalese rupees a head.

The duties upon the Bhote trade through Nepal are levied by Government officers, not farmed, and amount to per cent:—

Taksâr,	0	6	0
Nikâsj,	0	10	0
Bahidâr,	0	0	1

The chief exports to Bhote are "European Broad Cloths (crimson, green, orange, liver, and brown-colored). Cutlery, Pearls, Coral, Diamonds, Emeralds, Indigo, and Opium. Goods im-

* Sic in origine, but there is a mistake in all these figures. Four per cent. is four per cent. whatever the currency. Mr. Hodgson has converted the per centage, but not converted the hundreds.

ported into Nepal from Bhote (no duty levied there) pay to the Taksâr at Kâthmându as follows :—

ARTICLES.	DUTY.
Musk Pods, per seer, (in kind)	1½ Tolahs.
Gold, per tolah,	1 Anna.

Silver is all necessarily sold to the Taksar and is received at the Sieca weight, paid for at the Nèpalese or Mohari weight, difference three annas." The chief imports from Bhote are :—

ARTICLES.	DUTY.
Chours, white,	Per Dharni 4 Annas.
Ditto, black,	Ditto 3 "
Chinese and Bhotea Velvets, Wool- lens, Satins, Silk Thread, and Raw Silk,	} Per Cent. 4 Rupees.
Peltry of Mongolia and Bhote, as Samoor, Kakoon, Chuah-khal, Garbsooth, &c.,	
Borax,	Ditto 4 "
Chinese and Bhotea Tea,	Ditto 4 "
Drugs,	Ditto 4 "

A Dharni is three seers. The expence of transit to the Bhote frontier is Rs. 1-10 for each porter. He carries 48 seers. There are two roads one to Kooti and one to Keroong both Bhotea towns. The Nepalese rupee is worth 13 annas and the Bhote, nominally the same, five gundas less from its adulteration.

A table of good's amount wanted and price in Nepal are appended. It is remarked that Nepal is full of copper, iron and zinc. The people have some skill in working the former metals but not the latter ore. The country absorbs a great many horses, the gentry within the last fifteen years having become universally horsemen. The Nepalese Government pays for horses in elephants. Opium and Indigo are both in great demand in Thibet.

In exports the most valuable musk, rhubarb and borax. The rhubarb is the finest in the world, and is exported to Russia via Siberia. The paper of Nepal is very good and the drugs of Cachar and Thibet have a high reputation in the East. Tea may be had in any quantity, both tea in the English sense, and tea triturated and made into cakes. Vases, sword handles, snuff boxes, &c. are made of Yu, or oriental jade, and copper may be obtained in some quantities at 2 Rs. per seer.

The Geography of the Himalayas.—Mr. Hodgson says "I had been for several years a traveller in the Himalaya, before I could get rid of that tyranny of the senses, which so strongly impresses almost all beholders of this stupendous scenery with

the conviction that the mighty maze is quite without a plan. My first step towards freedom from this overpowering obtrusiveness of impressions of sense was obtained by steady attention to the fact, that the vast volume of the Himalayan waters flows more or less at right angles to the general direction of the Himalaya, but so that the numberless streams of the mountains are directed into a few grand rivers of the plains, either at or near the confines of the two regions. My next step was due to the singular significance of the topographic nomenclature of the Népalese, whose 'Sapt Gandaki' and 'Sapt Cousika' rivetted my attention upon the peculiar aqueous system of the Himalayas, urging me thenceforward to discover, if possible, what cause operated this marked convergence of innumerable transverse parallel streams, so as to bring them into a limited series of distinct main rivers. My third and last step was achieved when I discovered that the transcendent elevation and forward position, at right angles to the line of ghats, of the great snowy peaks, presented that causal agency I was in search of; the remotest radiating points of the feeders of each great river being coincident with the successive loftiest masses belonging to the entire extent of the Himalaya. It was in Népál that this solution of these problems occurred to me, and so uniformly did the numerous routes I possessed represent the points of extreme divergence of the great rivers by their feeders as synoptical with the highest peaks, that I should probably long ago have satisfied myself upon the subject, if my then correspondent, Captain Herbert, had not so decidedly insisted on the very opposite doctrine—to wit, that the great peaks intersect instead of bounding the principal alpine river basins." He enters into details useless without the map, and proceeds to discuss the climate. For every thousand feet gained in elevation you have a diminution of temperature equal to 3 and $3\frac{1}{2}$ Fahrenheit. "The whole of what I have denominated the 'lower region,' as well as all the deep beds of the larger rivers of the 'central region,' lying much below what I have given as the elevational demarcation of the two regions' or four thousand feet, are subject to the Awál.

"After what has been stated, it will be seen at once, that tables of temperature, rain-fall and moisture, could, if given, only hold true of the exact spots where they were registered." This great law is however disturbed by every kind of circumstance. "The latitude in a small degree, but in a far greater, the longitude or position with reference to the course of the rainy monsoon—the number of interposed ridges crossing that course—and the elevation, are the circumstances determining the heat and moisture that is, the climate, of any given

spot of the Eastern, Central, or Western Himalaya. There are amazing differences of climate in very proximate places of equal elevation, caused by their relative position to covering ridges, and also, as has been proved experimentally, by the effects of clearance of the forest and under growth and letting in the sun upon the soil."

The general character of the climate is temperate, for months the thermometer stays at temperate of Fahrenheit scarcely ranging 5° day and night. Storms are few, epidemics rare, goitre prevalent and special disease almost unknown. "The general character of the surface in all parts of the Himalaya is a perpetual succession of vast ridges, highly sloped, and having very narrow interposed glens. Valleys properly so called are most rare. There are in fact, only two throughout the great extent from Gilgit to Brahmakund, or those of Cashmere and of Nepal, the latter only sixteen miles in either diameter." Lakes are very small, and "every part of the chain abounds in minerals, particularly iron and copper; lead, sulphur, plumbago, in less degree. Mineral springs, both hot and cold, sapid and insipid, are generally diffused, and I am aware of other instances of lambent flame issuing in the fashion of the well-known Jwalamukhi of the Punjab, which superstition has consecrated." Salt is unknown, lime scarce, and no precious metals have been discovered. "In Botany the upper region is that of junipers, cypresses, cedars, larches, yews, poplars, boxes, dwarf rhododendrons, hollies, willows, walnuts, birches, and, in general, of the superior conifers, particularly to the South-East for to the North-West they descend into the middle region, even the stately cedar, which however is unknown East of Kumaun. In the second or central region birches, hollies, and willows recur. It is the region of oaks, chesnuts, horse chesnuts, magnolias, laurels, alders, tree rhododendrons, cherry and pear trees (large and wild), oleas, (forest trees), maples or sycamores, thorns, ashes, elms, horn-beams, elders, paper and wax trees, tea allies, (eurya and thea also, as an importation which has succeeded to perfection, but chiefly below 4,000), tree ferns, some few and peculiar palms, (chamærops, &c.), and the inferior sorts of pines. The third or lower region is that of sauls (shorea), sissus, (dalbergia), acacias and mimosas, tunds, (cedrela), cotton trees, (Bombax), treefigs, (elasticus, Indicus religiosus, &c.), butneas, dillennias, duabangas, erythrians, premnas, some common palms (Phoenix), &c., but rare and poor." The Northern region is exclusively inhabited by Bhoteas, the central and lower region are full of small tribes. These may be divided into dominant or unbroken, broken tribes, and out castes. The mountains seem to have been peopled from the great Turanian fount, by successive immigrations. The moun-

ains are full of animals. " To the upper region exclusively belong, among the Ruminants, the Bisons (*Poephagus*) and Musk, the Wild Goats (*Ibex*, *Hemitragus*) and Wild Sheep (*Pseudois*, *Caprovis*); among the Rodents, the Marmots and Pikas (*Lagomys*); among Plantigrades, the Bears proper (*Ursus*). In the middle region, true Bovines (*Bos*) take the place of the Bisons of the upper region; Bovine and Caprine Antelopes (*Budorcas*, *Capricornis*, *Nemorhedus*) replace its Musks and Wild Goats and Sheep; common Rats and Mice, and Hares and Porcupines and Hedgehogs its Marmots and Pikas; and Sun Bears (*Helarctos*) its true Bears; whilst the Deer family, unknown to the upper region, is here represented only by the anomalous Stilt-horns (*Styllocerus*). In the lower region the Ox family is represented by Bibos and Bubalus (splendid wild types); the Deer family, here abundant, by Rusa, Rucervi, Axes, and Stilt horns to boot; the Antelopes by Tetracerus, or the four-horned kind; the Rodents by the Bambu Rats (*Rizomys*) and Spiny Hares (*Caprolagus*); and the Bear family by the Honey Bears (*Mc-lursus*); add to all which that to this region are exclusively confined all the large Pachydermes, such as the Elephant and Rhinoceros; and the Monkeys also (*Semnopithecus* et *Macacus*), though not so exclusively in their case. The Carnivora, again, are represented in the upper region by Ounces, by Foxes of a large sort (*Montanus*), by the Weasels proper, and by the Ailuri or Catlories; in the middle region, by the Wild Dogs (*Cyon*), the Marten-Weasels, Leopards, Thick-tailed Leopards (*Macroceloides*), Wild Cats (*Murmensis*, *Pardochrous*, *Ogicbii*), Chauses or Lybian Lynxes (*Lybicus*), Zibets, Screwtails (*Paradoxurus*), and Prionodons; and in the lower region by Tigers, Leopards, Hyenas, Wolves, Jackals, insectivorous Foxes (*Kokri*), Bear-badgers (*Ursitaxus*), Sand-Bears (*Arctonyx*), Urvas, Mongooses, Helictes or Oriental Gluttons, Small Civets (*Viverrula*), Hirsute Screwtails, and sharp-faced Cats (*Celidogaster*). Zibets and Chauses occur in this region frequently, and one small species of Mongoose is found in special spots of the central region. The Otters in the upper region are represented by the small golden and brown species (*Aurobrunnea*); in the central, by *Monticola* and *Indigitata*; in the lower, by the large Chinese species (*Sinensis*). Among the Squirrels, the great thick-tailed and large purple species (*Macruroides* et *Purpureus*) belong solely to the lower region; the small Lokries (*Locria* et *Locroides*) to the central; and the Siberian, to the upper; whilst Flying Squirrels, a numerous group, (*Magnificus*, *Senex*, *Chrysothrix*, *Alboniger*), are confined to the central region, so far as appears. In the Bat group, the frugivorous species, or

Pteropines, all are limited to the lower region, whilst the Horse Shoes (Rhinolophine) specially affect the central region; and the Bats proper (Vespertilioninæ) seem to be the chief representatives of the family in the Northern region."

Mr. Hodgson describes the birds, and proceeds to sketch the geological features. As we approach the mountains we pass through the Terai or plain, the Bhaver, a vast primeval forest of saul, and the Dhuns of lower vallies. The Dhuns are divided from the forest, and are full of rich timber and malaria. East of the Mechi, the sandstone formation becomes invisible, and the Terai disappears. "I conceive that the lower region owes its distinctive character, as a whole, to the vast mass of diluvial detritus, which was shot from the mountains upon the plains, like gravel from a cart, at some great geological epoch, and which has been, since its deposit, variously and often abraded both in degree and direction, by oceanic, and, in a far less degree, by ordinary floods." Mr. Hodgson quotes proofs of this theory and proceeds to give the height of the Himalayan peaks:—

CHIEF PEAKS OF ANDES. FEET.			CHIEF PEAKS OF HIMALAYA. FEET.		
Aconcagua,	.. ..	23,000	Jamnoutri,	.. ..	25,669
Chimbarazo,	.. ..	21,424	Nanda-dévi,	.. ..	25,598
Sorato,	.. ..	21,286	Dhoul-giri,	.. ..	27,600
Illimani,	.. ..	21,149	Gosain-than,	.. ..	24,700
Descabasado,	.. ..	21,100	Dévalhúnga,	.. ..	29,002
Desya-cassada,	.. ..	19,570	Kangchan,	.. ..	28,176
			Chumalhari,	.. ..	23,929

THE NEPALESE MISSION TO PEKIN.

Bengal Records, No. XXVII.

IN 1843, the Maharajah of Nepal presented Mr. Hodgson with two papers containing the accounts of two Nepalese Missions to Pekin. Nepal has been bound to send such Missions every five years since 1792. The time of departure is usually in June, and the number of the Mission is rigidly fixed, and the Ambassador must always push on with only a month and a half at Lhassa, where the Nepalese have large establishments. He travels from Tingri on horseback, 1700 miles, and then enters a Chinese cart to do 700 miles more, being all the while in the hands of Chinese only, who are indifferent to caste. Till the last treaty with Thibet, the Nepalese Envoy, a high Hindu, had to eat tea, dogs and sun-dried flesh. The two papers seem to be drawn up with an especial eye to military expeditions. The two were

drawn up wholly independent of each other. The first or Chountra embassy set out in 1817 of the second or Kaji in 1822. The total distance "from Kathmandu to Pekin, according to the Kaji, is 1,268½ kos; according to the Chountra, 1,250 kos; and in that space occur, according to the former authority, 106 mountain ranges, which are crossed; according to the latter, 104. The Kaji's paper gives us the further information, that 150 lakes and tanks occur in the route; 652 rivers, crossed by 607 bridges and 23 ferries; and lastly 100 forts." And the

	<i>Political limits according to</i>		<i>Mountain ranges according to</i>	
	<i>Chountra.</i>	<i>Kaji.</i>	<i>Chountra.</i>	<i>Kaji.</i>
I. Nepal (from Kathmandu to Khasa),	29	34½	6	5
II. Tibet (from Khasa to iron bridge of Tachindo),	636	649½	63	71
III. China (Tachindo iron bridge to Pekin), ...	585	584½	35	30
	<hr/>	<hr/>	<hr/>	<hr/>
Kos,	1250	1268½	104	106

Mr. Hodgson details and fixes the site of each pass and mountain range, and deduces certain results as affecting the geology of the Himalayas. The general result of the discussion is that none of the facts can be fixed with certainty until the exploration of the whole of the Bam-i-dunya or Dome of the world, or Asie Centrale of Humboldt.

SUB-HIMALAYAN RACES.

Bengal Records, No. XXVII.

THE fifth paper contains an account of a journey from Kathmandu to Darjeeling which it is impossible to condense, while another describes the aborigines of the Sub-Himalayas, and gives a comparative table of twelve of the languages they speak. These tribes are all closely affiliated, and all from the North. "The legends of the dominant races indicate a transit of the Himalaya from thirty-five to forty-five generations back—say 1,000 to 1,300 years, and that I prefer the remoter period, because the transit was certainly made before the Tibetans had adopted from India the religion and literature of Buddhism, in the seventh and eighth centuries of our era. This fact is as clearly impressed upon the crude dialects and cruder religious tenets of the sub-Himalayans as their Northern origin is upon their peculiar

forms and features, provided these points be investigated with the requisite care, for superficial attention is apt to rest solely upon the Lamaism recently as imperfectly imported among them, and upon the merely exceptional traits of their mixed and varying physiognomy." The type is Mongolian but softened, and the complexion pale brown like high caste Hindus. "The general description of the Himalayans, both of earlier and later immigration is as follows:—head and face very broad, usually widest between the cheekbones, sometimes as wide between the angles of the jaws; forehead broad, but low and somewhat receding; chin defective; mouth large and salient, but the teeth vertical and the lips not tumid; gums, especially the upper, thickened remarkably; eyes wide apart, flush with the cheek, and more or less obliquely set in the head; nose pyramidal, sufficiently long and elevated, save at the base, where it is depressed so as often to let the eyes run together, coarsely formed and thick, especially towards the end, and furnished with large round nostrils. Hair of head, copious and straight; of the face and body deficient. Stature rather low, but muscular and strong. Character phlegmatic, and slow in intellect and feeling, but good humoured, cheerful and tractable, though somewhat impatient of continuous toil. Polyandry yet exists partially, but is falling out of use. Female chastity is little heeded before marriage, and drunkenness and dirtiness are much more frequent than in the plains. Crime is much rarer, however, and truth more regarded, and the character on the whole amiable." The people are indifferent to all creeds, and intensely clannish, never intermarrying. The people have no notion of a common progenitor or "eponymous Deity," and are usually nomadic cultivators. They have no craftsmen, all such work being performed by helot races located among them for years. The women of each tribe are its domestic manufacturers.

Mr. Hodgson describes their original abode or Thibet. This is a truncated triangular plateau, "stretching obliquely from South-east to North-west between 28° and 36° of North latitude and 72° and 102° of East longitude. It is cold and dry in the extreme, owing to its enormous elevation, averaging 12,000 feet above the sea, to the still vaster height of those snowy barriers which surround it on every side, and which on the South reach 29,000 feet, to an uncommon absence of rain and cloud, to the extreme rarification of its atmosphere, to its saline and sandy soil, and, as a consequence of all these and a reciprocating cause too to the excessive scantiness of its vegetation. It is bounded on the South by the Hemachal, on the North by the Kuenlun, on the West by the Belur, and on the East by the Younling—all for the most part perpetually snow-clad, and of which the

very passes on the South average 16,000 to 17,000 feet of elevation." It is for the most part a plain, but cut up by ravines and low hills. It is nowhere a desert, and has been for ages the great track of commerce, and of ethnological movement "South of the whole of Tibet, as above defined, lie the sub-Himalays, stretching from Gilgit to Brahmakund, with an average breadth of ninety miles, divided climatically into three pretty equal transversal regions, or the Northern, the Central and the Southern, the first of which commences at the ghat line of Hemachal, and the last ends at the plains of Hindostan; the third lying between them with the great valley of Nepal in its centre. That valley is of a lozenge shape, about sixteen miles in extreme length and breadth, cultivated highly throughout, and from 4,200 to 4700 feet above the sea. The only other valley in the whole Eastern half of the sub-Himalayas is that of Jumla, which is smaller and higher, yielding barley (*Hordeum celeste*), as the great valley, rice. To the West is the large but single vale of Cashmere and the Duns, both too well known to require further remark." The sub-Himalayas are a congeries of mountains, very precipitous and with deep glens covered with rich mould. "The great rivers descend from the snows in numerous feeders, which approach gradually and unite near the verge of the plains thus forming a succession of deltaic basins, divided by the great snowy peaks as water-sheds thus :—

	<i>Basins.</i>	<i>Peaks.</i>
1.	Alpine Gangetic basin.	Nanda-devi.
2.	" Karnalic basin.	Dhavala-giri.
3.	Gandacean basin.	Gosain-than.
4.	Cosian basin.	Kangchanjunga.
5.	Tishtan basin.	Chumalhari.
6.	basin of the Monas. The Gemini two unnamed peaks."	

In these five regions lie the sub-Himalayan races. All bear the Thibetan characteristics in a greater or less degree, and "if they all be (as surely they are) of the same Turanian origin, it must be allowed that very striking differences of climate and of habits, operating through very many generations, can produce no obliterative effects upon the essential and distinctive signs of race."

The seventh paper is on the military tribes of Nepal. The Bramhuns from the twelfth century downwards fled from the tide of Mussulman invasion to Nepal. They made the people Hindoos, raised their chiefs and fighting men to the rank of Kshatriyas, and added to them the fruit of their own intercourse with native women. The Khas or dominant tribe are now Kshatriyas, still insist that children of commerce between their

women and Bramhuns shall be Kshatriyas, shall wear the thread, and shall assume the father's name. Gradually the Khas thus half civilized conquered the surrounding tribes, and became thoroughly Hindooized. The Ekthariah is the descendant of Rajpoots driven into the hills, and as they intermarried less assume a vague superiority over the Khas with whom however they are inextricably blended. The Thakuris differ only from the Ekthariah "by the accidental circumstance of their lineage being royal. At some former period, and in some little State or other, their progenitors were princes." The remaining divisions are the Magar and Gurung who now supply most of the soldiers. They are less Bramhunized, and though adopted into Hindooism as a caste above Sudras and Vaisyas are not thoroughly Hindoos. Of them all the Khas are the most devoted to the House of Goorkha. "These highland soldiers, who despatch their meal in half an hour, and satisfy the ceremonial law by merely washing their hands and face, and taking off their turbans before cooking, laugh at the pharisaical rigour of our *Sipahis*, who must bathe from head to foot and make *puya*, ere they begin to dress their dinner, must eat nearly naked in the coldest weather, and cannot be in marching trim again in less than three hours.

"In war, the former readily carry several days' provisions on their backs: the latter would deem such an act intolerably degrading. The former see in foreign service nothing but the prospect of glory and spoil: the latter can discover in it nothing but pollution and peril from unclean men and terrible wizards, goblins, and evil spirits. In masses, the former have all that indomitable confidence, each in all, which grows out of national integrity and success: the latter can have no idea of this sentiment, which yet maintains the union and resolution of multitudes in peril, better than all other human bonds whatever; and, once thoroughly acquired, is by no means inseparable from service under the national standard."

The eighth paper is on the Chepang and Kusunda tribes. These are two broken tribes apparently of an earlier population. They pay no taxes and acknowledge no allegiance, live by hunting in huts made of boughs; they are a slight but not a deformed race, very dark, with long heads, protuberant mouths, low narrow foreheads, high cheek bones, flat faces, and small eyes. Mr. Hodgson is satisfied chiefly by the lingual test that the Chepangs spring from the Lhopas of Bhutan, and that the deterioration of colour and size arises from long continued degradation. Lhopa is the native name for an inhabitant of Bhutan. Bhutan is Sanscrit and means Bhutant or the end of Bhote, the Bramhuns taking that region to be the end of Thibet.

The ninth paper is a description of Nayakote and the people inhabiting it. "Nayakote, or the Hither Nayakote, as it is often called to distinguish it from Nayakote of the Choubisi, is the name of a petty town and district lying W. N. W. seventeen miles from Kathmandu, by the high road to Gorkha." The town "consists of from sixty to a hundred pakka three storied houses, in the Chinese style of Kathmandu, chiefly owned by the court and chiefs; of a durbar, called the upper, to distinguish it from the lower one on the banks of the Tadi; and of a temple to Bhairavi, all in the like style of architecture." The town was formerly the winter residence of the nobles of Kathmandu but is now given up. Mr. Hodgson describes the city, and defines the district as a plateau with two valleys or legs extending from it. All are swampy, hot, rice bds. The low lands are very thinly peopled, only by wild tribes. The whole district is supposed by Mr. Hodgson to contain 350 houses. The soil is clayey mixed with silex and calx, and produces besides the higher cercalia, the orange and pine apple. The Bombay mango spoils becoming dropsical, but almost all kinds of tropical fruits flourish. Rice grows especially in the Biasis, the spots below the plateau. The staple crop of Nayakote is Munsera, a bright golden rice, and the ook or local sugar-cane of which there are five varieties is incomparably better than that of most parts of India. Of the whole surface of the Tars or plateaux of the valley half is devoted to orchards. The lower classes are tribes who affect to be hillmen. They are dark with slender forms, oval faces, elevated features and a peculiar dialect. They seem to be of the class to which the Indian aborigines belong. They comprise five races who will not intermarry, but whose distinctive peculiarities are slight.

Mr. Hodgson describes the rivers, the Sindhu which rises from Sindhubhanjung, an offsett from Mount Manichur, and after a course of fifteen miles falls into the Tadi.

The Likhu runs parallel to the Sindhu rising from above the Kabilas ridge, and after a course of twenty miles falling into the Tadi.

The Tadi or Suryavati rising in the most easterly of the twenty-two little lakes in Gosain-than, has a course of thirty miles to Devi Ghat where it merges in the Trisool.

The Trisool rises from the principal of the twenty-two lakes of Gosain-than which "occupies a flat summit of considerable extent, that cannot be less than 16,000 feet high, and lies immediately below the unrivalled peak variously called Nilkant, Gosain-than, and Dhawala-giri." This lake is about a mile in circuit and from it the river issues in three clefts. It is a deep blue arrowy stream.

The tenth paper is on the tribes of Northern Thibet (Horyeul and Sokyeul) and Sifan. It contains a series of vocabularies in seven tongues being the languages spoken by tribes dwelling in Thibet. "For my part I apprehend that the true characteristics of the Chinese and Tibetan languages have been a good deal obscured by bookmen, Native and European; and though it be somewhat premature to venture an opinion before I have completed my pending investigation of the Gyarung and Horpa tongues I still must say that I suspect few competent Judges will rise from the attentive study of this and my two prior series of vocabularies, without feeling a conviction that the Indo-Chinese, the Chinese, the Tibetans, and the Altaians have been too broadly contra-distinguished, and that they form in fact but one great ethnic family, which moreover includes what is usually called the Tamulian element, of Indian population, as well as nearly every element of the population of Oceanica." The vocabularies in Mr. Hodgson's opinion shew the intimate connection of all these families. "And I infer that the differences characterizing this vast family of languages however striking at first sight are subordinate, because when the languages are examined upon a broad enough scale, these differences are seen to pass away by insensible gradations." Mr. Hodgson analyses the distinctions of the dialects, and: "I think, I may safely affirm upon the strength of my vocabularies, that the Sokpo of the Tibetans are, as has been already assumed in this paper, no other than the Olet and Kalmak of Rumusat and Klaproth, whilst their conferees, the Horpa, are almost as evidently Turkish, the Turkish affinity of the latter being inferred, not only from the vocables, but from the complex structure of Horpa verbs and from the quassi-Arian physiognomy of the samples I have seen of the Horpa race." Therefore the Sokpo are not the famous race which gave an appellation to Sogdiana. "Reverting to what I have better assurance of, I shall next note a fact as extraordinary almost as that which formed the subject of my last communication to the society, to wit, that some of Humboldt's characteristics of the Malayo-Polynesian tongues hold good as to the Gyarung language even more strangely than Rosen's of the Circassian; so that we may have possibly, in the unsophisticated tongue of this primitive race of mountaineers, situated centrally between the Chinese, the Indo-Chinese, the Tibetans, and the Altaians, and protected from absorption, assimilation or conquest by their fastnesses, the main and middle link of that vast chain which unites the insular and continental nations of the East and the most dispersed scions of the immensely diffused family of the Mongolidæ."

Neither of these great tribes Sokpo and Horpa employ any

writing. As to the physical unity of the tribes Mr. Hodgson supplies the following table, with descriptions of the individual from whom it was taken:—

Amdoan. Horpa. Gyarung. Manyak.

	I.	II.	III.	IV.
Height without shoes,	5.8.½	5.7.½	5.3.0	5.4.0
Length of head, from crown to chin (with calipers),	0.8.½	0.8.½	0.9.0	0.9.½
Girth of head,	1.10.0	1.9.½	1.10.¾	1.10.¾
Length of head, fore and aft, or forehead to occiput,	0.7.¾	0.7.¾	0.8.0	0.8.0
Width of head, between parietes,	0.6.½	0.6.0	0.6.¾	0.6.¾
Crown of head to hip,	2.4.¾	2.4.0	2.3.½	2.3.0
Hip to heel,	3.3.¾	3.3.½	2.11.½	3.1.0
Width between the shoulders,	1.4.0	2.1.0	1.1.½	1.4.0
Girth of chest,	3.1.0	2.9.0	2.11.½	2.11.¾
Length of arm and hand,	2.6.¾	2.6.0	2.4.¾	2.4.0
Ditto of arm,	1.0.0	1.0.0	0.11.½	0.11.½
Ditto of fore-arm,	0.11.0	0.10.0	0.9.½	0.9.3
Ditto of hand,	0.8.0	0.7.¾	0.7.¾	0.7.½
Ditto of thigh,	1.8.0	1.7.0	1.6.½	1.7.0
Ditto of leg to ankle,	1.4.½	1.5.0	1.3.0	1.5.0
Ditto of foot,	0.11.0	0.10.0	0.9.½	0.9.½
Width of hand,	0.4.¾	0.4.¾	0.4.0	0.4.0
Ditto of foot,	0.4.¾	0.4.½	0.4.½	0.4.0
Girth of thigh,	1.9.0	1.4.¾	1.6.¾	1.7.½
Ditto of calf,	1.3.½	1.1.¾	1.2.0	1.1.½
Ditto of fore-arm,	0.11.0	0.9.¾	0.10.0	0.9.½

The eleventh paper contains an account of the systems of Law and Police in Nepal. It was obtained from various individuals and is written in the form of question and answer. There are four Courts according to one account of Law in Kathmandu. According to another there are eight. The jurisdiction is civil only but has no territorial limits. The Supreme Court in the Kot Linga where the head judicial officer always presides. They sit permanently, never quitting the capital, but when necessary sending out Judges; when any body is dissatisfied, he appeals to the Premier. If he will not do justice he appeals to the Raja, who appoints a Council or Committee of Ministers to hear his case. The judicial officers sit in such cases with the Ministers.

The authority of the Dharmadhikari is only over-caste questions, and he punishes by fine.

If the prosecutor fails to appear the offender is remanded to prison.

There are four Provincial Courts, two for the East and two for the West from whom an appeal lies to the Supreme Court. All civil cases are within their jurisdiction, and all criminal cases except "1, *Brahmahatya*, or slaying a *Brahman*; 2, *Gouhatya*, or killing a cow; 3, *Strihatya*, or killing a woman; 4, *Balahatya*, or

killing children ; and 5, Patki ; and all unlawful intercourse of the sexes, such as incest, adultery or whatever involves a loss of caste by the higher party." The Provincial Courts are appointed by the Provincial Governors subject to the approval of the Durbar. The Judges are " at the capital, one *dit'ha* for all the four courts ; and for each of them two *bicharis*, one *jamadar*, twenty-five *sipahis*, twenty-five *mahanias*, and five *chaprassis*. The *dit'ha* gives orders to the *bichari*, the *bichari* to the *jamadar* ; and the *jamadar* to the *sipahis* and *mahanias* who serve processes, and see that all persons are forthcoming when required for the purpose of justice. [Another authority adds the following to the list of officers, after the *bichari*, viz. the *bahidar*, *araz-begi* and two *naikia*. The *dit'ha* (he says) decides ; the *bichari* conducts the interrogation of the parties, and ascertains the truth of their statements ; the *bahidar* writes the *kail-mama*, which the *bichari's* interrogation has forced from the party in the wrong ; the *araz-begi* is the superintendent of the jail, and sheriff or officer who presides over, and is answerable for, executions. The *naikias*, with their *mahanias*, inflict the *kora* when needed, and they are also subordinate to the *araz-begi*."] The Judges are paid by salaries and fees. All cases not involving life may be referred to Punchayuts at the discretion of the parties, but cases of assault are seldom so referred. The Punchayuts are appointed by the Judge with the consent of the parties. The executive aid of the Court is lent to them and the Court carries out their decision. The Punchayuts must be unanimous and the higher castes must be tried by higher castes. The Punchayuts are never paid any thing in civil suits. " If the plaintiff be absent and the defendant present, it is the custom to take security from the defendant to appear when called upon at some future time and to let him depart : no decision is come to in such cases. If the plaintiff be present and the defendant absent, the latter is not therefore cast ; he is searched for, and until he is found, no decision can be pronounced "

Security is also taken from prosecutors and witnesses, the procedure is as follows :—" If a person comes into court and states that another person owes him a certain sum of money, which he refuses to pay, the *bichari* of the court immediately asks him for the particulars of the debt, which he accordingly furnishes. The *bichari* then commands the *jamadar* of the court to send one of his *sipahis* to fetch the debtor ; the creditor accompanies the *sipahi* to point out the debtor, and pays him two *annas* per diem, until he has arrested the latter and brought him into court. When he is there produced, the *dit'ha* and *bicharis* interrogate the parties face to face. The debtor is asked if he acknowledges the debt alleged against him, and will imme-

diately discharge it. The debtor may answer by acknowledging the debt, and stating his willingness to pay it as soon as he can collect the means, which he hopes to do in a few days. In this case, the *bichari* will desire the creditor to wait a few days. The creditor may reply that he cannot wait, having immediate need of the money; and if so, one of the *chaprassis* of the court is attached to the debtor, with directions to see to the producing of the money in court, by any means. The debtor must then produce money or goods, or whatever property he has, and bring it into court. The *dit'ha* and *bicharis* then, calling to their assistance three or four merchants, proceed to appraise the goods produced in satisfaction of the debt, and immediately discharge it; nor can the creditor object to their appraisement of the debtor's goods and chattels. In matters thus arranged, that is, where the defendant admits the cause of action to be valid, 5 per cent. of the property litigated is taken from the one party, and 10 per cent. from the other, and no more. If the defendant, when produced in court in the manner above described denies, instead of confessing, the debt, then the plaintiff's proofs are called for; and if he has only a simple note of hand unattested, or an attested acknowledgment, the witnesses to which are dead, then the *dit'ha* and *bicharis* interrogate the plaintiff thus: 'This paper is of no use as evidence; how do you propose to establish your claim?' The plaintiff may answer: 'I lent the money to the father of the defendant; the note produced is in his hand-writing, and my claim is a just claim.' Hereupon the plaintiff is required to pledge himself formally to prosecute his claim in the court in which he is, and in no other. The words enjoining the plaintiff thus to gage himself, are '*Beri t'hapo*;' and the mode is by the plaintiff's taking a rupee in his hand, which he closes, and strikes the ground, exclaiming, at the same time, 'My claim is just, and I gage myself to prove it so.' The defendant is then commanded to take up the gage of the plaintiff, or to pledge himself in a similar manner to attend the court duly to the conclusion of the trial, which he does by formally denying the authenticity of the document produced against him, as well as the validity of the debt; and upon this denial he likewise strikes the earth with his hand closed on a rupee. The rupee of the plaintiff and that of the defendant, which are called *beri*, are now deposited in court. The next step is for the court to take the fee called *karpan*, or five rupees, from each party. The amount of both *beri* and *karpan* is the perquisite of the various officers of the court, and does not go to the government. The giving of *karpan* by the parties implies their desire to refer the dispute to the decision of the ordeal; and accordingly, as

soon as the *karpan* is paid down, the *dit'ha* acquaints the government that the parties in a certain cause wish to undergo the ordeal. The necessary order is thereupon issued from the Darbar; but when it has reached the court, the *dit'ha* and *bicharis* first of all exhort the parties to come to an understanding and effect a settlement of their dispute by some other means; if however, they will not consent, the trial is directed to proceed. The ordeal is called *nyaya*, and the form of it is as follows: The names of the respective parties are described on two pieces of paper, which are rolled up into balls, and then have *puja* offered to them. From each party a fine or fee of one rupee is taken; the balls are then affixed to staffs of reed, and two *annas* more are taken from each party. The reeds are then intrusted to two of the *havildars* of the court to take to the Queen's Tank; and with the *havildars*, a *bichari* of the court, a *brahman*, and the parties proceed thither, as also two men of the *Chamakhalak* (or *Chamara*) caste. On arriving at the tank, the *bichari* again exhorts the parties to avoid the ordeal by adopting some other mode of settling the business, the merits of which are only known to themselves. If they continue to insist on the ordeal, the two *havildars*, each holding one of the reeds, go, one to the East and the other to the West side of the tank, entering the water about knee deep. The *Brahman*, the parties, and the *Chamakhalaks*, all at this moment enter the water a little way; and the *Brahman* performs *puja* to VARUNA in the name of the parties, and repeats a sacred text, the meaning of which is, that mankind know not what passes in the minds of each other, but that all inward thoughts and past acts are known to the gods SURYA, CHANDRA, VARUNA, and YAMA; and that they will do justice between the parties in this cause. When the *puja* is over, the *Brahman* gives the *tilak* to the two *Chamakhalaks*, and says to them, 'Let the champion of truth win, and let the false one's champion lose!' This being said, the *Brahman* and the parties come out of the water, and the *Chamakhalaks* separate, one going to each place where a reed is erected. They then enter the deep water, and at a signal given, both immerse themselves in the water at the same instant. Whichever of them first rises from the water, the reed nearest to him is instantly destroyed, together with the scroll attached to it. The other reed is carried back to the court where the ball of paper is opened, and the name read. If the scroll bear the plaintiff's name, he wins the cause; if it be that of the defendant, the latter is victorious. The fine called *jit'hour* is then paid by the winner and that called *harouri* by the loser; besides which, five rupees are demanded from the winner in return for a turban which he gets, and the same sum, under

the name of *sabhasudd'ha* (or purification of the court), from the loser. The above four demands on the parties, viz. *jit'hour*, *harouri*, *pagri* and *sabhasudd'ha*, are government taxes ; and, exclusive of these, eight *annas* must be paid to the *mahanias* of the court, eight *annas* more to the *kotmal*, eight more to the *kumhal-naikias*, and, lastly, eight more to the *khaddar* or registrar. In this manner multitudes of causes are decided by *nyaya* (ordal), when the parties cannot be brought to agree upon the subject matter of dispute, and have neither documentary nor verbal evidence to adduce." Complainant states his case and if the accused denies evidence is heard. Then " if the witnesses depose positively to their having seen the accused commit the murder, the latter is again asked what he has to say ; and if he still refuses to confess, he is whipped until he does ; the confession when obtained, is reduced to writing and attested by the murderer, who is then put in irons and sent to jail. Cases of theft, robbery, incest, &c. are also thus dealt within Nepal, and the convict sent to prison. When the number amounts to twenty or thirty, the *dit'ha* makes out a calendar of their crimes, to which he appends their confession, and a specification of the punishment usually inflicted in such cases. This list the *dit'ha* carries to the *Bharadar Sabha* (council of state), whence it is taken by the *premier* to the prince, after the *dit'ha's* allotment of punishment to each convict has been ratified, or some other punishment substituted. The list, so altered or confirmed in the council of state, and referred by the *premier* to the prince, is as a matter of form, sanctioned by the latter, after which it is re-delivered to the *dit'ha* who makes it over to the *araz-begi*. The latter, taking the prisoners, the *maha-naikias*, and some men of the *Porya* caste with him proceeds to the banks of the *Bishen-mati* where the sentence of the law is inflicted by the hands of the *Poryas* and in the presence of the *araz-begi* and the *maha-naikias*. Grave offences, involving the penalty of life or limb are thus treated. With respect to mutual revilings and quarrels, false evidence, false accusation of moral delinquency, and such like minor crimes and offences, punishment is apportioned with reference to the caste of the offender or offenders."

The parties plead invariably *viva voce*, and there are no *vakeels*. Sometimes a relative is admitted to speak. The witnesses are unpaid, but the accused and accuser are invariably confronted. Perjury in mild cases is punished with fine, in heavy cases with corporal chastisement or death. Oral testimony is given on oath or the *Hari-vansa*, but in the absence of evidence ordeals are employed as a substitute. The parties depose in their own suits, and no evidence is recorded except on very grave

questions. No fees are charged during trial but a percentage on the amount claimed is paid by both parties and also a fee to the Judge.

The village system is imperfect in Nepal, but there is a village police, and the State "instead of collecting its revenues, and paying its establishments out of them, prefers the method of assigning its revenual claims directly to its functionaries, and leaving them to collect the amount; while, as judicial follows revenual administration in Nepal, the government feels little concern about territorial divisions: in the whole country Westward, from *Kathmandu*, as far as the *Narayani* river, and Eastward as far as the *Dud Kosi* River, there is no specific *arrondissement*, district, or *zillah*. These large tracts of country are assigned principally to the *Compu*, or army stationed in the capital; and their judicial administration is for the most part in the hands of deputies of the Officer, supervised by certain migratory royal judges, called mountain-*bicharis*."

The rules of inheritance vary in each tribe but among the Khas sons by concubines get a third of the share of a legitimate son, adoption is confined to kindred, and wills except for more main purposes are disallowed. "The creditor may attach duns to the debtor, to follow and dun him wherever he goes. The creditor may also stop the debtor wherever he finds him; take him home, confine, beat and abuse him; so that he does him no serious injury in health or limbs. [Another answer states, that the creditor may seize upon the debtor, confine him in his own house, place him under the spout that discharges the filthy wash of the house, and such like; but he has no further power over him].

"Destruction of human life, with or without malice and, in whatever way, must be atoned for by loss of life. Killing a cow is another capital crime. Incest is a third. Deflowering a female of the sacred tribe subjects a man of a lower caste to capital punishment, and the confiscation of all his property. Robbery is a capital crime. Burglary is punished by cutting off the burglar's hands." Women and Bramhuns are never executed, but degraded in every possible way and then expelled Nepal.

The Newars take no heed of adultery but among the Parbattias, the husband may kill the adulterer.

The laws of Nepal are excessively stern as regards the intercourse of the castes. A Bramhun who has intercourse with a woman of lower caste except a prostitute is disgraced, banished. Any other man so offending is slain. Any woman having intercourse with an outcaste, among whom Mussalmans are reckoned immediately has her nose cut off, and is banished as an outcaste. "A male outcaste, who has intercourse, under any circumstances, with a pure Hindu female, and whether the fe-

male be the seducer or the seduced, be maid, wife, or widow, chaste, or a wanton, is adjudged to die ; and the female is rendered noseless and an outcaste ; unless of the sacred order, when her nose is spared. If an outcaste female pass herself off for one of a pure caste and have commerce with a Hindu, she shall have her nose cut off ; and he, if he confess his sin so soon as he discovers it, shall be restored to caste by penance and purification ; but if he have connexion knowingly with such a female, he shall be emasculated, and made an outcaste."

TRADE OF THE MADRAS TERRITORIES

FOR 1856-57.

IMPORTS.

			<i>Merchandize.</i>	<i>Treasure</i>
Gangam,	..	...	Rs. 16,077	Rs. 48,000
Vizagapatam,..	..	..	3,42,998	
Rajahmundry,	..	..	3,42,460	1,76,359
Masulipatam,..	..	..	98,433	
Guntoor,	..	..	4,984	
Nellore,	..	..	15,930	30,843
Madras,	..	..	1,42,90,385	1,02,46,760
South Arcot, ..	..	..	86,264	63,366
Tanjore,	..	..	10,61,485	9,17,647
Madura,	..	..	1,27,415	
Tinnevelly,	..	..	3,21,534	5,57,631
Malabar,	..	..	49,61,700	21,38,103
Canara,	..	..	18,74,579	28,59,868

EXPORTS.

Gangam,	...	..	Rs. 9,07,895	
Vizagapatam,..	...	...	19,08,755	
Rajahmundry,	...	...	14,10,124	67,800
Masulipatam,...	...	...	3,40,075	
Guntoor,	...	...	2,717	
Nellore,	...	...	1,06,507	
Madras,	...	...	1,23,46,911	32,15,472
South Arcot, ...	...	...	8,51,285	1,500
Tanjore,	...	...	32,44,587	10,000
Madura,	...	...	3,36,365	

Tinnevelly,	27,62,574	21,500
Malabar,	48,70,635	8,612
Canara,	76,45,328	2,014

The re-exports are also given, and the tonnage which is as follows :—

	<i>Arrivals.</i>	<i>Departures.</i>
	Tons, 7,0 6	30,960
Ganjam,	10,535	42,596
Vizagapatam,	28,076	52,449
Rajahmundry,	4,578	10,291
Masulipatam,	146	46
Guntoor,	7,823	8,943
Nellore,	2,79,725	2,73,298
Madras,	7,664	14,242
South Arcot,	40,737	66,413
Tanjore,	22,166	21,533
Madura,	24,261	27,079
Tinnevelly,	1,42,834	1,58,002
Malabar,	76,505	88,631
Canara,		

The following is the description of the trade article by article :—

IMPORTS.					
<i>Articles.</i>					<i>Rs.</i>
Alum, ... .. .	...	...	Cwt.	...	5,695
{ Boots and Shoes, ... .. .	...	...	Value.	...	12,447
{ Buttons, .. . . .	...	...	ditto,	...	3,778
{ Gloves, ... .. .	...	...	ditto,	...	10,756
{ Gold and Silver Lace and Thread, ... .. .	...	...	ditto,	...	1,54,829
{ Haberdashery, ... .. .	...	...	ditto,	...	49,908
{ Hats and Caps, .. . . .	...	...	ditto,	...	21,072
{ Hosiery, ... .. .	...	...	ditto,	...	44,785
{ Millinery, ... .. .	...	...	ditto,	...	3,50,985
{ Wearing Apparel, ... .. .	...	...	ditto,	...	1,54,076
{ Do. Military, ... .. .	...	...	ditto,	...	33,111
Arms and Ammunition, ... .. .	...	...	ditto,	...	43,515
Bats and Balls, ... .. .	...	...	ditto,	...	2,917
Beads, ... .. .	...	...	ditto,	...	32,554
Billiard Tables, ... .. .	...	...	ditto,	...	3,056
Books & Stationery.	{ Books—British, ... .. .	...	ditto,	...	1,11,642
	{ Do. Foreign, ... .. .	...	ditto,	...	3,899
	{ Prints and Engravings, ... .. .	...	ditto,	...	4,931
	{ Stationery, ... .. .	...	ditto,	...	2,65,998
Brushes, ... .. .	...	...	ditto,	...	6,112
Cabinetware, ... .. .	...	...	ditto,	...	8,688
Cards—Playing, ... .. .	...	...	ditto,	...	4,635
Carriages, ... .. .	...	...	ditto,	...	6,185

Carried forward, ... 13,35,074

<i>Articles.</i>					<i>Rs.</i>
Brought forward, ...					13,35,074
Cattle—Horses,					No., 6,32,930
Chalk,					Tons, 3,641
Chunks,					No., 6,318
Coach Furniture,					Value Rs., 9,007
Coal and Coke,					Tons, 66,421
Coffee,					lbs., 987
Congreves or Matches,					Value Rs., 2,777
Corks,					Gross, 24 842
Cotton Wood,					lbs., 25,743
Cotton Goods.	{ Twist and Yarn—British,				„ 22,17,433
	{ Ditto Foreign,				„ 52,955
	{ Thread,				„ 71,374
	{ Piece Goods—Dyed,				{ Pieces, 6,05,308
	{ Ditto, Printed,				{ Yards, 3,44,995
	{ Ditto, Plain,				{ Pieces, 19,02,080
Cow	{ Lace & Small ware,				{ Yards, 7,037
	{ Tails,				Value Rs., 2,050
Rugs.	{ Aculakar,				Cwt., 2,050
	{ Arsenic,				ditto, 1,579
	{ Assafoetida,				ditto, 1,997
	{ Borax and Tincal,				ditto, 47,269
	{ Brimstone,				ditto, 11,798
	{ Camphor,				ditto, 20,334
	{ Ditto Green,				lbs., 95,031
	{ China Root,				ditto, 11,144
	{ Cinnabar,				Cwt., 13,262
	{ Copperas,				ditto, 7,851
	{ Cubcbs,				ditto, 2,495
	{ Gallinal,				ditto, 5,131
	{ Gallnuts,				ditto, 8,114
	{ Goodauck,				ditto, 9,854
	{ Liquorice Root,				ditto, 5,769
	{ Long Pepper Root,				ditto, 3,427
	{ Musk,				ditto, 8,467
	{ Opium—On Company's Account,				lbs., 1,100
	{ Potash,				Cases., 1,100
	{ Russacarpoorum,				Cwt., 5,014
Dyes.	{ Sulphuric Acid,				ditto, 1,103
	{ Turpentine,				Gallons, 381
	{ Other Sorts,				ditto, 4,876
	{ Catechu or Terrajaponica,				Value Rs., 45,262
	{ Choyaroot,				Cwt., 8,627
Dyes.	{ Cochineal,				ditto, 6,700
	{ Cochineal,				ditto, 3,573

Carried forward, .. 76,41,730

<i>Articles.</i>		<i>Rs.</i>	
		Brought forward, ...	76,41,730
Dyes.	Indigo, ...	lbs.,	1 634
	Madder or Munjeet, ...	Cwt.,	22 551
	Poovathoo, ...	ditto,	25,624
	Saffron, ...	lbs.,	8,108
	Other Sorts, ...	Value Rs.,	3,681
Eppapindy, ...		Cwt.,	1,274
Fans, ...		Value Rs.,	609
Fireworks, ...		ditto,	29,473
Fruits and Nuts.	Albacur, ...	Cwt.,	1,738
	Almonds, ..	ditto,	19,185
	Betel Nut—Boiled, ...	ditto,	1,21,836
	Ditto Raw, ...	ditto,	2,24,992
	Cashew Nuts, ...	ditto,	406
	Cocoanuts, ...	No.,	41,081
	Ditto Kernels, ...	Cwt.,	48,441
	Dates, ...	ditto,	1,98,811
	Kissmiss, ...	ditto,	7 65.3
	Raisins, ...	ditto,	29,140
	Tamarind, ...	ditto,	22,390
Glassware.	Other Sorts, ...	Value Rs.,	5,197
	Bottles, ...	ditto,	77,145
	Other Sorts, ...	ditto,	96,210
Grain.	Caramanaroo, ...	Quarters,	1,752
	Dholl, ...	ditto,	22,112
	Horse Gram, ...	ditto,	3,002
	Menoomooloo, ...	ditto,	34,083
	Paddy, ...	ditto,	3,65,622
	Pease, ...	ditto,	81,801
	Pessaloo, ..	ditto,	3,517
	Rice, ...	ditto,	12,23,959
	Sanagaloo, ...	ditto,	50,411
Grocery.	Wheat, ...	ditto,	1,97,598
	Other Sorts, ..	Value Rs.,	3,974
Asphaltum, ...		ditto,	8 673
Gums.	Benjamin, ..	Cwt.,	3,727
	Glue, ...	ditto,	67,232
	Rosin, ..	ditto,	6,072
	Other Sorts, ...	ditto,	464
	Other Sorts, ...	Value Rs.,	1,561
Gunnies and Gunny Bags, ...		No.,	3,02 791
Hides.	Tanned, ..	ditto,	12 266
	Untanned, ...	ditto,	1 063
Ice, ...		Tons,	1,21,860
Instru- ments.	Astronomical, ...	Value Rs.,	1,000
	Pand, ...	ditto,	4,230
	Chemical, ..	ditto,	2,726

Carried forward, ... 1,12,20,405

Articles.				Rs.		
				Brought forward, ...	1,12,20,405	
Instruments.	{	Mathematical,	...	Value Rs.	6,884	
		Musical,	...	ditto,	48,713	
		Philosophical,	...	ditto,	6,073	
		Surgical,	...	ditto,	3,719	
		Surveying,	...	ditto,	5,184	
		Telegraphic,	...	ditto,	100	
		Other Sorts,	...	ditto,	2,319	
Ivoryware,	...	...	ditto,	2,741	
Jewellery.	{	Clocks and Watches,	...	No.,	31,393	
		Coral,	...	ditto,	1,36,866	
		Do. False,	...	ditto,	3,650	
		False Pearls,	...	ditto,	7,567	
		Lamitta,	...	ditto,	4,257	
		Other Sorts,	...	ditto,	75,703	
Lac Stick,	...	...	Cwt.,	15,142	
Machinery,	...	...	Value Rs.	1,10,049	
Malt Liquors,	...	...	Gallons,	2,93,035	
Manufactured Metals.	{	Brassware,	...	Value Rs.	40,180	
		Copperware,	...	ditto,	6,971	
		Cutlery,	...	ditto,	38,899	
		Hardware,	...	ditto,	1,31,504	
		Ironware,	...	ditto,	53,837	
		Lacqueredware,	...	ditto,	1,225	
		Platedware,	...	ditto,	50,292	
		Silver Plate,	...	ditto,	12,070	
		Silverware,	...	ditto,	4,447	
		Tinware,	...	ditto,	3,330	
		Types—Printing,	...	ditto,	23,210	
		Other Sorts,	...	ditto,	29,852	
Marble Slabs,	...	...	ditto,	2,662	
Mats,	...	...	ditto,	3,558	
Ditto Bags,	...	...	ditto,	1,601	
Materials.	{	Book Binding,	...	ditto,	5,154	
		Drawing,	...	ditto,	4,656	
		Printing,	...	ditto,	3,673	
		Shoe Maker's,	...	ditto,	2,556	
		Watch,	...	ditto,	1,638	
Medicines,	...	...	ditto,	32,772	
Metals.	{	Copper.	Bolt and Ingot,	...	ditto,	1,17,198
			Composition,	...	ditto,	1,11,601
			Nails,	...	ditto,	13,397
			Old,	...	ditto,	72,573
			Rod,	...	ditto,	24,777
			Sheet,	...	ditto,	2,21,119
			Sheathing,	...	ditto,	27,970
			Slabs and Tiles,	...	ditto,	50

Carried forward, ... 1,30,16,581

<i>Articles.</i>		<i>Rs.</i>	
		Brought forward, ...	1,30,16,581
Metals.	Iron.	Value Rs.	7,27,770
	Bar and Bolt, ...	..	ditto, 57,644
	Hoop, ...	...	ditto, 16,085
	Nails, ...	...	ditto, 2,582
	Old, ...	...	ditto, 8,324
	Pig, ...	...	ditto, 32,670
	Rails, ..	...	ditto, 39,132
	Rod, ..	...	ditto, 34,601
	Sheet, ...	...	ditto, 1,764
	Shot, ...	...	ditto, 3,613
	Wire, ...	...	ditto, 6,684
	Swedish, ...	...	ditto, 41,742
	Gong Metal, ...	...	Cwt., 34,127
	Steel, ...	...	ditto, 60,645
	Spelter, ...	..	ditto, 37,004
	Tin, ...	..	ditto, 12,246
	Ditto Plates,...	...	ditto, 12,299
	Lead Pig, ...	...	ditto, 1,887
	Ditto Sheet, ...	..	ditto, 19,298
	Brass, ...	..	ditto, 81,392
	Ditto Composition,	...	ditto, 50,406
	Ditto Old, ..	...	ditto, 14,502
	Ditto Sheet, ...	...	ditto, 1,407
	Ditto Sheathing, ..	..	ditto, 4,142
	Ditto Wire, ...	...	ditto, 13,280
	Patent Sheathing, ...	..	ditto, 9,147
	Yellow Metal, ...	...	ditto, 2,078
	Ditto Nails, ...	...	ditto, 16,564
	Ditto Sheathing, ...	...	ditto, 28,118
	Quicksilver, ..	...	ditto, 2,000
	Zinc, ...	...	ditto, 26,969
	Other Sorts, ..	...	Value Rs.,
Military Stores.	On Company's Account, ...	...	ditto, 13,39,067
	On Private Account, }	...	ditto, 23,438
Molasses or Jagree, ...		Cwt.	24,490
Naval Stores.	Anchor, ...	...	Value Rs. 3,346
	Canvas, ...	...	Bolts, 18,616
	Chain Cable, ...	...	Cwt. 3,731
	Coir and Coir Rope, ..	...	ditto, 71,045
	Cordage, ..	...	ditto, 5,754
	Hemp, ...	...	ditto, 31,574
	Do. Rope, ...	...	ditto, 3,913
	Pitch, Tar and Dammer, ...	...	ditto, 31,277
Naval Stores.	Twine, ...	...	ditto, 13,024
	Other Sorts, ...	...	Value Rs. 20,591

Carried forward, ... 1,60,06,569

<i>Articles.</i>		<i>Rs.</i>	
		Brought forward, ...	1,60,06,569
Oils.	Cassia,	Gallons,	657
	Castor,	ditto,	8,797
	Cinnamon,	ditto,	522
	Cocconut,	ditto,	12,433
	Cod Liver,	ditto,	1,071
	Gingely,	ditto,	11,171
	Fish,	ditto,	2,278
	Linseed,	ditto,	6 004
	Wood,	ditto,	3,049
Other Sorts,		Value Rs.	4,652
Oilman's Stores,		ditto,	1 29 870
Paint & Colours.	Arthal,	Cwt.	1,655
	Red Lead,	ditto,	1,317
	Ditto Ochre,	ditto,	1,820
	Sandarach (Sundroos), ..	ditto,	2,170
	Varnish,	ditto,	4,834
	Verdigris,	ditto,	2,407
	Vermillion,	ditto,	8 027
	White Lead,	ditto,	7,906
Other Sorts,		Value Rs.,	22,829
Papier-mache Ware,		ditto,	2 222
Perfumery,	Eau-de-Cologne,	dozens,	3,276
	Lavender,	ditto,	1,408
	Rose Water,	Gallons,	10,608
	Other Sorts, ..	Value Rs.	33,027
Photographic Apparatus,		ditto,	17,060
Pictures and Portraits,		ditto,	10,169
Picture Frames,		ditto,	492
Pipe Staves and Casks,		ditto,	83,107
Porcelain & Earthenware,		ditto,	1,10,296
Precious Stones.	Diamonds,	ditto,	44,400
	Pearls,	ditto,	29,090
	Rubies,	ditto,	16 750
	Other Sorts, ..	ditto,	43,725
Provisions.	Arrowroot,	Cwt.	1,045
	Parley,	ditto,	2,117
	Confectionery, ..	Value Rs.	33,504
	Flour,	Cwt.	4,451
	Fresh,	Value Rs.	22,476
	Ghee,	Cwt.	14,575
	Sago,	ditto,	4 583
	Salted,	Value Rs.	61,750
Other Sorts,		ditto,	12,807
Railway Materials,		ditto,	32,46,923
Rattans and Canes,		ditto,	6,566
Saddlery,		ditto,	49,968

Carried forward, ... 2,01,06,433

<i>Articles.</i>		<i>Rs.</i>	
		Brought forward, ...	2,01,06,433
Salt.	{ On Company's Account,	... lbs.	83,653
	{ Goa, ...	... "	1,146
On Private Account,		... "	64,554
Saltpetre, ...		... Cwt.	3,988
Seeds.	{ Adjuvan, ...	... Quarters,	817
	{ Coriander, ...	... ditto,	23,670
	{ Cummin, ...	... ditto,	92,081
	{ Fenegreek, ...	... ditto,	24,078
	{ Fenal, ...	... ditto,	6,690
	{ Gingely, ...	... ditto,	30,986
	{ Mustard, ..	... ditto,	17,209
{ Other Sorts, ...		... Value Rs.	11,155
Shawls—Cashmere,		... Pieces	5,443
Silk Raw—British, ..		... lbs.,	35,159
Silk Piece Goods.	{ British, ...	{ Pieces,	1,70,452
	{ Foreign, ..	{ Yards,	39,769
	{ Velvet, British, ...	{ Pieces,	4,365
		{ Yards,	
Shoe Blacking, ...		... Value Rs.	1,651
Soap, ...		... ditto,	12,051
Spectacles, ...		... ditto,	3,049
Spices.	{ Cardamums, ...	... lbs.,	6,291
	{ Cassia, ...	... ditto,	5,203
	{ Cinnamon, ..	... ditto,	2,331
	{ Cloves, ..	... ditto,	65,475
	{ Ginger, ..	... ditto,	20,395
	{ Mace, ...	... ditto,	8,775
	{ Nutmeg, ...	... ditto,	12,342
	{ Pepper, ...	... ditto,	41,125
	{ Ditto Long. ..	... ditto,	20,680
	{ Ditto White, ...	... ditto,	1,425
{ Other Sorts, ...		... Value Rs.	7,378
Spirits.	{ Arrack, ...	... Gallons,	2,11,126
	{ Brandy, ...	... ditto,	1,37,240
	{ Gin, ...	... ditto,	10,446
	{ Rum, ..	... ditto,	2,717
	{ Whiskey, ...	... ditto,	465
{ Other Sorts, ...		... Value Rs.	154
Sugar, ...		... Cwt.,	55,670
Ditto Loaf, ...		... ditto,	3,142
Ditto Candy, ...		... ditto,	12,545
Statuary, ...		... Value Rs.,	2,100
Tea, ...		... lbs.	1,23,262

Carried forward, ... 2,14,88,686

<i>Articles.</i>		<i>Rs.</i>	
Brought forward, ...		2,14,88,686	
Timber and Planks.	Teak, ...	Value Rs.,	1,45,173
	Mahogany	ditto,	2,983
	Other Sorts,...	ditto,	8,60,764
Tabacco.	Manufactured,	{ No., } { lbs., }	11,297
	Unmanufactured,		2,73,391
Toys.	...	Value Rs.	15,798
Trunks and Boxes,	...	ditto,	9,386
Umbrellas,	...	No.	26,323
Wax and Wax Candles,	...	lbs.	29,166
Wines.	Cape, ...	Gallons,	13 759
	Champaigne, ...	ditto,	16,720
	Cherry Brandy,	ditto,	612
	Claret—English, ...	ditto,	1,092
	Ditto French, ...	ditto,	31,490
	Cider and Perry, ...	ditto,	1,084
	French, ...	ditto,	2,502
	Curacoa, ..	ditto,	1,195
	Ginger, ...	ditto,	196
	Hock, ...	ditto,	1,467
	Lisbon, ..	ditto,	2,783
	Madeira, ...	ditto,	17,990
	Marasquino, ...	ditto,	388
	Marsella, ...	ditto,	383
	Moselle, ..	ditto,	1,669
Woods.	Noyeau, ...	ditto,	480
	Port, ...	ditto,	23,039
	Sherry, ...	ditto,	1,07,143
	Other Sorts, ...	Value Rs.,	19,783
	Sandalwood, ...	Cwt.	2,929
Woods.	Sappan, ...	ditto,	224
	Other Sorts, ...	Value Rs.	23,754
Wood Screw,	...	ditto,	6,495
Wool,	...	lbs. ...	1,448
Woollens.	Alpacca, ...	{ Pieces, } { Yards, }	9,045
	Billiard Cloth, ...	{ Pieces, } { Yards, }	989
	Blankets, ...	{ Pieces, } { Yards, }	8,328
	Blue Cloth, ...	{ Pieces, } { Yards, }	7,340
	Broad Cloth, ...	{ Pieces, } { Yards, }	51,898
	Carpets, ...	{ Pieces, } { Yards, }	1,630

Carried forward ... 2,32,23,822

<i>Articles.</i>				<i>Rs.</i>
Brought forward, ...				2,32,23,822
Woollens.	Circassian Cloth, ...	...	Pieces, } Yards, }	1,270
	Davalies, ...	...	Pieces, } Yards, }	1,223
	Doe Skins, ...	...	Pieces, } Yards, }	5,987
	Drab Cloth, ...	...	Pieces, } Yards, }	915
	Flannel, ...	...	Pieces, } Yards, }	21,426
	Gambroons, ...	...	Pieces, } Yards, }	1,423
	Medium Cloth, ...	...	Pieces, } Yards, }	1,279
	Merino, ...	...	Pieces, } Yards, }	2,007
	Scarlet Cloth, ...	...	Pieces, } Yards, }	10,481
	Serge, ...	...	Pieces, } Yards, }	1,318
	Shawls, ...	...	Pieces, }	7,450
	Tweeds, ...	...	Ditto, } Yards, }	5,359
	Worsted, ...	...	Pieces, } Yards, }	7,657
	Other Sorts, ...	...	Value Rs.	60,507
	Sundries, ...	...	ditto,	1,73,120
Total Merchandize, ...				2,35,25,244
Treasure. { Gold, ...				29,81,753
{ Silver, ...				1,40,55,629
{ Copper, ...				1,200
Total Treasure, ...				1,70,38,582
Total Merchandize & Treasure, ...				4,05,63,826

EXPORTS.

				Articles.		Value	Rs.
Apparel.	{	Boots and Shoes,	...	...	...	Rs.	13,029
		Gold Thread and Lace,	...	...	...	ditto,	16,320
		Haberdashery,	...	...	...	ditto,	2,836
		Hats and Caps,	...	...	...	ditto,	150
		Hosiery,	...	...	...	ditto,	900
		Millinery,	...	...	...	ditto,	3,541
		Wearing Apparel,	...	...	...	ditto,	33,013
		Arms and Ammunition,	...	...	...	ditto,	4,283
		Bangles,	...	...	...	ditto,	1,463
		Beads,	...	...	...	ditto,	4,310
	{	Books,	...	...	...	ditto,	22,024
		Stationery,	...	...	...	ditto,	1,984
		Bones,	...	...	...	Cwt.	7,395
		Cabinet Ware,	...	...	...	Value Rs.	16,313
		Carriages,	...	...	...	ditto,	7,282
Cattle.	{	Bullocks,	...	...	...	No.	36,900
		Horses,	...	...	...	ditto,	4,000
		Sheep,	...	...	...	ditto,	21,320
		Chanks,	...	...	...	Value Rs.	75,532
		Coffee,	...	...	...	lbs.	9,44,446
		Cotton, Wool,	...	...	...	"	72,22,286
Cotton Goods.	{	Cotton Twist and Yarn,	...	...	...	"	39,620
		Thread,	...	...	...	"	4,922
		Piece Goods, Dyed.	...	...	{	Pieces,	8,57,172
						Yards,	...
		Do. Plain,	...	...	{	Pieces,	9,21,502
						Yards,	...
		Do. Printed,	...	...	{	Pieces,	2,46,625
						Yards,	...
		Dregs of Gingely Oil,	...	...	...	Cwt.	63,949
Drugs.	{	Aloes,	...	...	...	ditto,	2,249
		Camphor,	...	...	...	lbs.	304
		Coculus Indicus,	...	...	...	Cwt.	1,984
		Cuscus Root,	...	...	...	ditto,	1,023
		Gallnut,	...	...	...	ditto,	14,573
		Garlic,	...	...	...	ditto,	17,171
		Kaud Seque Checke,	...	...	...	ditto,	1,805
		Myrabolanes,	...	...	...	ditto,	5,380
		Nux Vomica,	...	...	...	ditto,	1,458
		Senna,	...	...	...	ditto,	25,877
		Zedora Zerumbeth,	...	...	...	ditto,	1,219
		Other Sorts,	...	...	...	Value Rs.	10,544

Carried forward, ... 1,06,5 6,204

<i>Articles.</i>		<i>Rs.</i>	
		Brought forward, ...	1,06,56,204
Dyes.	{ Catechu or Terrajaponica, Cwt.		4,365
	{ Indigo, lbs.		47,24,631
	{ Turmeric, Cwt.		1,21,529
Embroidery,		Value Rs.	939
Feathers,		No.	9,631
Firewood,		Value Rs.	14,840
Fishmaws,		Cwt.	4,235
and Nuts.	{ Betel Nut—Boiled,	{ ditto.	2,22,694
	{ Ditto Raw,	{ No.	
	{ Cocoanut,	{ Cwt.	1,78,269
Ditto Kernel,		No.	4,61,961
Dates,		Cwt.	4,36,772
Tamarind,		ditto,	3,470
{ Other Sorts,		ditto,	10,658
Fuller's Clay,		Value Rs.	719
Goolal Powder,		Cwt.	5,304
Glass { Bottles,		Value Rs.	7,975
{ Other Sorts,		ditto,	3,413
Ware,		ditto,	5,522
Grocery,		ditto,	60
Gra	{ Anoomooloo,	Quarters,	7,674
	{ Condooloo,	ditto,	4,052
	{ Dhol,	ditto,	18,325
	{ Horse Gram,	ditto,	46,635
	{ Menoomooloo,	ditto,	8,673
	{ Natcheny,	ditto,	11,309
	{ Paddy,	ditto,	3,65,066
	{ Pease,	ditto,	19,366
	{ Pessaloo,	ditto,	18,650
	{ Rice,	ditto,	51,19,522
	{ Ditto Shavee,	ditto,	2,574
	{ Sunagaloo,	ditto,	2,42,711
	{ Wheat,	ditto,	1,12,797
Other Sorts,		Value Rs.	13,751
Gums of Sorts,		ditto,	523
Gunnies and Gunny Bags,		No.	14,244
Hides and	{ Tanned,	ditto,	8,22,773
	{ Untanned,	ditto,	5,65,060
Skins,		Cwt.	2,440
Honey,		No.	
Horns,		Cwt.	1,00,719
Hooka Shells,		Value Rs.	4,481
Instrument—Band,		ditto,	2,025
Ivory and Elephant's Teeth,		ditto,	4,519
„ Ware,		ditto,	2,455

 Carried forward, ... 2,43,83,535

<i>Articles.</i>				<i>Rs.</i>	
Brought forward, ..				2,43,83,535	
Jewel- lery.	{ Clocks and Watches,	...	Value Rs.	6,792	
	{ Other Sorts,	...	ditto,	36,211	
Machinery,	...	...	ditto,	2,050	
Malt Liquors,	...	...	Gallons,	27,587	
Manufactur- ed Metals.	{ Brassware,	...	Value Rs.	5,989	
	{ Ironware,	...	ditto,	279	
	{ Platedware,	...	ditto,	3,290	
	{ Silverware,	...	ditto,	1,951	
	{ Other Sorts,	...	ditto,	5,216	
Mats, ...	...	...	ditto,	8,544	
Medicines	...	...	ditto,	1,249	
Metals.	{ Copper.	{ Bolt and Ingot,	...	Cwt,	300
		{ Old,	...	ditto,	6,050
		{ Sheet,	...	ditto,	994
	{ Iron.	{ Bar and Bolt,	...	ditto,	47,059
		{ Cast,	...	ditto,	20,096
		{ Hoop,	...	ditto,	1,838
		{ Kentledge,	...	ditto,	2,789
		{ Pig,	...	ditto,	12,317
	{ Steel.	{ ...	...	ditto,	2,193
		{ Spelter,	...	ditto,	313
		{ Other Sorts,	...	Value Rs.	1,525
Military Accoutrements,	...	...	ditto,	5,814	
Military Stores.	{ On Company's Account,	...	ditto,	1,32,550	
	{ On Private Account,	...	ditto,	3,797	
Molasses or Jagree,	...	...	Cwt.	40,121	
Ditto Palmira,	...	...	ditto,	2,037	
Musical Instruments,	...	...	Value Rs.	9,267	
Naval Stores.	{	Coir and Coir Rope,	...	Cwt.	2,97,422
		Do. on Company's Account,	...	ditto,	24,000
		Hemp,	...	ditto,	41,289
		Pitch, Tar and Dammer,	...	ditto,	4,438
		Other Sorts,	...	Value Rs.	7,817
Oils.	{	Cassia,	...	Gallons,	3,295
		Castor,	...	ditto,	28,169
		Cocoonut,	...	ditto,	5,04,722
		Eloopa,	...	ditto,	1,225
		Fish,	...	ditto,	9,088
		Gingely,	...	ditto,	54,918
		Lamp,	...	ditto,	36,637
		Linseed,	...	ditto,	2,406
		Manilla,	...	ditto,	55,346
		Margosa,	...	ditto,	1,058
		Other Sorts,	...	Value Rs.	3,224
Oilman's Stores,	...	...	ditto,	2,440	
Perfumery—Sandal Oil,	...	...	ditto,	34,868	

Carried forward, ... 2,58,84,115

<i>Articles.</i>		<i>Rs.</i>	
Brought forward, ..		2,58,84,115	
Pipe Staves and Casks, ...	.. Value Rs.	22,698	
Pictures and Portraits, ...	ditto,	8,411	
Porcelain and Earthenware, ..	ditto,	6,474	
Precious Stones.	{ Diamonds, ...	ditto,	43,250
	{ Garnets, ..	ditto,	2,410
	{ Pearls, ...	ditto,	11,450
	{ Rubies, ..	ditto,	43,165
	{ Other Sorts, ...	ditto,	2,605
Printing Materials, ...	..	1,000	
Provisions.	{ Arrow Root, ...	Cwt.	44,212
	{ Confectionery, ...	ditto,	1,221
	{ Flour, ..	ditto,	120
	{ Fresh, ...	Value Rs.	62,987
	{ Ghee, ..	Cwt.	3,58,196
	{ Salted, ...	Value Rs.	55,512
Rattans and Canes—Bamboos, ..	{ Other Sorts, ...	ditto,	11,114
		ditto,	12,315
Reeds, ...	..	ditto,	3,415
Saddlery, ...	..	ditto,	935
Salt. { On Company's Account, ...	..	lbs.,	29,097
	{ On Private Account, ...	ditto,	80,336
Saltpetre, ...	..	Cwt.	1,09,699
S. ds. {	{ Agseh, ..	Quarters,	2,53,810
	{ Castor, ...	ditto,	20,161
	{ Coriander, ..	ditto,	17,452
	{ Cotton, ..	ditto,	4,814
	{ Croton, ..	ditto,	1,406
	{ Cummin, ...	ditto,	3,522
	{ Fenegreek, ...	ditto,	3,392
	{ Gingely, ...	ditto,	17,07,799
	{ Lamp Oil, ..	ditto,	2,98,564
	{ Linseed, ...	ditto,	21,194
	{ Manila, ..	ditto,	12,431
	{ Mustard, ..	ditto,	22,900
	{ Naigree, ...	ditto,	5,719
	{ Valasaloo, ..	ditto,	6,276
Sharkfins, ...	{ Other Sorts, ..	Value Rs.	6,546
		Cwt.	23,028
Silk Piece Goods, {	{ Shawls—Cashmere, ..	Pieces,	1,449
	{ Silk Piece Goods, ...	ditto,	18,351
	{ Do.—Raw, ..	lbs.,	4,75,761
Soap, ...	..	Cwt.,	1,40,110
Spices.	{ Cardamums, ...	lbs.,	4,14,555
	{ Cassia, ...	ditto,	3,594
	{ Ditto Buds, ...	ditto,	6,660
	{ Chillies, ...	ditto,	75,970

Carried forward, ... 3,03,40,256

Articles.				Rs.		
				Brought forward, ..	3,03,40,256	
Spices.	Cinnamon, ... ..	..	...	lbs.	4,143
	Cloves, ... ..	...	..	ditto,	19,327
	Ginger, ... ..	..	...	ditto,	69,185
	Mace, ... ..	..	...	ditto,	669
	Nutmegs, ... ..	..	...	ditto,	1,308
	Pepper, ... ..	...	...	ditto,	9,43,740
Spirits.	Other Sorts, ... ..	...	...	Value Rs.	1,999
	Arrack, ... ..	...	...	Gallons,	17,059
	Brandy, ... ..	...	...	ditto,	10,978
	Gin, ... ..	...	...	ditto,	971
	Rum, ... ..	...	...	ditto,	39,313
	Whiskey, ... ..	...	...	ditto,	216
Sugar.	Other Sorts, ... ..	...	...	Value Rs.	12
	Sugar, ... ..	...	...	Cwt.	37,90,482
	Do Candy, ... ..	...	...	ditto,	1,842
Tallow.	Do. Loaf, ... ..	...	...	ditto,	2,198
	Tallow, ... ..	...	...	ditto,	6,493
Tea.	Tea, ... ..	...	...	lbs.	57,461
	Planks.	Poon, ... ..	...	Value Rs.	21,283
		Teak,	ditto,	2,42,670
		On Company's Account,	ditto,	36,770
		Other Sorts,	ditto,	17,269
Tobacco.	Unmanufactured,	Manufactured, ... ..	...	No. lbs.	32,187
		{ Private Account,	...	..	1,70,158
			{ Company's Account,	6,020
Tortoiseshells, ... ..				...	1,740
Toys,				Value Rs.	2,929	
Trunks and Boxes,				ditto,	2,531	
Umbrellas,				No.	2,754	
Wax and Wax Candles,				lbs.	89,329	
Wines.	Champaigne, ... ..	...	...	Gallons,	1,157
	Claret, ... ..	...	...	ditto,	1,629
	Madeira, ... ..	...	...	ditto,	2,288
	Port, ... ..	...	...	ditto,	7,725
	Sherry, ... ..	...	...	ditto,	9,002
	Other Sorts, ... ..	...	...	Value Rs.	124
Woods.	Black, ... ..	...	...	ditto,	50,751
	Ebony, ... ..	...	...	ditto,	1,899
	Jungle, ... ..	...	...	ditto,	1,41,716
	Red, ... ..	...	...	Cwt.	1,65,192
	Sandal, ... ..	...	...	ditto,	1,22,096
	Sappan, ... ..	...	...	ditto,	48,922
	Satin, ... ..	...	...	ditto,	1,770
Other Sorts,				Value Rs.	22,963	
Woodenware,				ditto,	2,338	
Wool,				lbs.	27,261	

Carried forward, ... 3,65,40,120

<i>Articles.</i>				<i>Rs.</i>
		Brought forward, ...		3,65,40,120
Woollens.	Blankets, ...	...	{ Pieces, } { Yards, }	24
	Carpe's ...	...	{ Pieces, } { Yards, }	23,134
	Cumblies, ...	...	{ Pieces, } { Yards, }	5,160
	Flannel, ...	..	{ Pieces, } { Yards, }	3
	Serge, ...	...	{ Pieces, } { Yards, }	1,086
	Shawls, ...	...	Pieces,	817
	Other Sorts, ...	..	... Value Rs.	6,934
	Sundries, ...	..	... ditto,	1,49,550
Total Merchandize,		...	...	3,67,26,828
Treasure.	{ Gold, ...	...	...	4,000
	{ Silver. { On Company's Account,	...	...	10,00,000
	{ On Private " "	...	...	23,29,678
Total Treasure,		...	...	33,33,678
Total Merchandize and Treasure, ..		...	...	4,00,60,506

CASES IN MADRAS POLICE OFFICES.

1856.

ON 19th October, 1857, Colonel J. C. Boulderson, Commissioner of Police, reports on the business of the year. After noticing the tables appended, the Commissioner advocates an increased Police Force for the harbour, and mentions that he does not consider the Police force of the Presidency, though greatly increased, too large. Colonel Boulderson reviews certain cases and observes that the great majority are thefts and assaults.

The Coroner's report appended shews a total of 169 inquests, against 87 in 1850. There has been a decided increase every year, probably caused by the greater efficiency of the Police. Of these cases 53 were from drowning, the wells being left unguarded. There were four cases of cold and starvation, three deaths from snake bites, one from a shark bite, and six of suspected infanticide. Sixteen were reported to the Coroner but in ten decomposition had gone too far. There is reason to suspect that infanticide is very prevalent in Madras.

General Comparative Statement of Cases summarily disposed of by the Magistrates and those committed for trial to the Criminal Quarterly Sessions in Her Majesty's Supreme Court of Judicature at Madras from the Royapett and Town Police Courts during the year 1856.

Charges.	Number of cases.	Number of persons sentenced to death.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons convicted and imprisoned.	Number of persons flogged.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Total number of persons.
Assault with intent to kill or do some grievous bodily harm, ...	3	..	1	..	..	..	.. 3	..	2	3
Aggravated assaults, ...	5	..	..	4	..	.. 6	1,125	..	4	7
Assaults, ...	3,349	..	..	1	10	..	7	..	4,752	5,897
Assaulting Police Officers, ...	13	..	..	..	..	.. 1	..	..	6	14
Attempting to steal or suspected of stealing, ...	85	..	..	5	..	..	.. 2	..	133	139
Aiding and abetting in assault cases, ...	2	..	..	..	..	..	.. 4	..	..	2
Abuse, ...	4	..	..	..	..	..	.. 4	..	..	9
Allowing prisoners to escape, ...	9	..	..	..	..	..	.. 4	..	..	9
Breach of the Peace, ...	2,094	..	..	1	..	..	2,817	..	1,359	4,181
" of the Police Regulation No. 4, vending viz. Liquor or Toddy without licence and smuggling under Act XIX. of 1852, ...	14	..	..	..	..	..	5	..	12	17
" of Police Regulation No. 6, using false Weights and Measures, ...	33	..	..	..	..	..	27	..	22	49
" of Police Regulation No. 10, furious and careless riding and driving, ...	157	..	..	..	..	7	173	..	118	298

General Comparative Statement of Cases summarily disposed of by the Magistrates, &c.—(Continued).

Charges.	Number of cases.	Number of persons sentenced to death.	Number of persons transported.	Number of persons sentenced to hard labor.	Number of persons convicted and imprisoned.	Number of persons flogged.	Number of persons fined.	Number of persons dismissed from the service.	Number of persons acquitted or dismissed.	Total number of persons.
Injuring trees, public property, &c.,	33	..	..	1	..	..	22	..	28	51
Ill treating cattle,...	1	..	..	..	..	..	..	..	1	1
Ill-usage,	..	..	..	..	..	..	..	..	..	..
Keeping a gambling house, ...	4	..	..	..	..	..	..	..	5	5
Kidnapping or stealing children under the age of 10 years,	..	..	..	..	..	..	..	..	..	..
Larceny,	47	..	..	40	..	..	..	..	35	92
Landing grain out of the prescribed limits,	5	..	..	3	..	24	..	..	87	114
Murder,	2	..	..	..	..	..	..	..	1	2
Misdemeanors, ...	657	1	..	3	..	10	308	1	699	1,021
Music or beating of tom-tom, &c. without permission.	1	..	..	..	..	..	1	..	3	4
Nuisance,	2,423	..	..	..	..	6	3,180	..	976	4,162
Neglect of Duty, ...	910	..	..	..	..	24	750	9	215	998
Obstructing the road,	16	..	..	..	..	..	18	..	14	32
Overloading (boats),	3	..	..	..	..	..	..	..	5	5
Obtaining under false pretences,	3	..	1	2	..	..	..	..	..	3
Purchasing Regimental clothing or necessaries,	2	..	..	..	..	..	2	..	1	3
Poisoning cattle, ...	..	..	..	..	..	..	..	..	..	..
riotous behaviour,	67	..	..	..	..	..	80	..	44	124

Refusing to work, neglect of duty, and disobedience of orders,	33	...	...	8	...	5	3	...	25	41
... to maintain wife and children, ...	67	...	...	...	...	...	7	...	65	72
Refusal of duty,	12	...	...	...	...	...	...	...	19	68
Receivers, ... ..	...	...	3	4	...	...	...	...	6	13
Revolt,	1	...	...	5	...	...	...	...	...	5
Refusing to pay wages (seamen), ... ..	...	...	...	...	...	...	...	...	...	...
Refusing to join the ship to which he is bound by the Articles, ... ..	...	...	...	...	...	...	...	...	...	...
Simple larceny,	720	...	...	...	...	...	...	...	390	878
Snatching away by force, or taking forcible possession, Subtle, craft or cheat,	18	...	...	...	...	...	11	...	20	31
Stealing from the person,	1	...	...	1	...	...	...	...	...	1
Swindling, cheating or fraud,	4	...	2	...	...	...	...	...	4	6
Secreting themselves on board the ship without the consent of the Master or Mate or Consignee of the ship, ... ..	...	...	...	...	...	...	...	...	...	...
Shooting, cutting or wounding with intent to murder, Taking away or obtaining by undue means,	537	...	...	223	...	...	...	...	455	765
Threatening to assault or using threatening language, Trespass,	23	...	...	...	...	...	...	...	33	34
Using indecent language,	209	1	114	...	241	356
Undermanning (boats),	49	1	52	...	21	77
Uttering,	1	...	1	5	5
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Violation of duty as Police Officers,	1	45	...	1	2	...	81	129
Offences committed under the <i>Conservancy Act No. 14</i> <i>of 1856.</i>	1	1
Allowing sewerage to run on the public road,	1	...	...	...	...	...	...	...	...	13
Slaughtering cattle without license,	1	...	...	...	...	...	13	...	...	...
Throwing filth on the public road,	4	...	...	...	...	...	...	...	5	5
	12,138	1	49	403	697	203	8,825	11	10,350	20,509

On 26th November, 1857 the Government remark on the delay which has occurred in presenting the Report, and observe that the Harbour Police has been sanctioned by the Supreme Government. They remark on the value of the Monegar Choultry to which 113 persons in the last stage of destitution, and 127 idiots were brought by the Police. They consider the post mortem examinations should not be made where the cause of death is self-evident, and ask for information on the risk to life caused by the state of private wells.

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EDITED BY

MEREDITH TOWNSEND.

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1858.

ADVERTISEMENT.

THE Governments of India publish on an average a volume every four days. From Reports affecting the entire Empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha bye-road in a frontier province, every thing finds a place in these publications. There is scarcely a subject connected with Indian Administration on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is however, widely scattered. The Records of one Presidency are scarcely known in another. The books are not very readily procurable, and above all they are like all other Blue Books dry, indigested, and overlaid with detail. It costs an hour to find a fact and in India men who care about facts cannot spare hours.

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A word may be necessary on the arrangement adopted. It is intended that the most important subject should have the largest space, but in estimating the relative importance of the records the Compiler has been compelled to rely on his own judgment. Usually all subjects of imperial interest have the preference, statistics occupy the next place, and subjects purely historical the last. They are not very important, and not at all interesting, but they can only be condensed to a certain point.

THE
ANNALS
OF
INDIAN ADMINISTRATION.

CRIMINAL JUSTICE IN THE MADRAS
PRESIDENCY.

THE last report of the Foujdaree Udalt is for the year 1856. The report though dated only up to the end of December, 1856 was not submitted to Government until the 18th of June, 1857. The delay was owing to the non-receipt of returns from one of the Lower Courts.

The Madras Criminal Statistics are arranged under two classes : "petty offences" and "crimes and misdemeanors." The former class include such crimes as petty assaults, cattle stealing and theft ; the latter embrace homicide, murder, gang robbery, rape, &c. as against the person, and forgery, perjury and housebreaking as against property.

In Ganjam with an estimated population of 9,26,930, 5060 persons were summoned for petty offences and of these 1,159 or 22 per cent. were punished. Of the persons summoned 27 only were dealt with by the Magistracy, 3986 by the district police and 1047 by the village police. The returns exhibit but little improvement as compared with those of 1855. Cattle stealing and theft had indeed rather diminished, but of 205 persons summoned for these crimes all but 87 escaped unpunished.

In the same district of Ganjam there occurred 269 cases of crime and misdemeanor implicating 684 persons. In 169 of these cases not one of the parties implicated, supposed to number 373 persons, were apprehended. Thus the perpetrators of 62 per cent. of the crimes committed during the year were not discovered. The Police Magistracy and Courts examined into 118 cases of crime in which 302 persons were implicated and of these 30 per cent, were alone punished. The returns

under this head also exhibit but little improvement over those of 1855. Of heinous offences against the person but very few were reported during the year. Thus there were only three murders and one rape, the bulk of the crimes consisted in burglary. The compiler of the returns observes on the report submitted to Government, "there has been an increase of 717 in the number of persons pending and summoned, and 84 in the number punished for petty offences as compared with the previous year, as also a total increase in the crimes and misdemeanors of 19 cases and 55 persons." The working of the village police in this district is reported to be improving; the number of cases disposed of by them being somewhat greater in 1856 than in the former year.

The population of Vizagapatam is estimated in the report at 12,54,272 persons. The number of persons summoned for petty offences was 4,844 or only one in every two hundred and fifty-nine persons. Fifteen per cent. of those summoned were punished and only one case of cattle stealing was reported as occurring in the whole district. The village police dealt with 2 persons, the district police with 4,829 and the Magistracy with 3.

One hundred and fifty-seven cases of crime and misdemeanor implicating 315 persons were reported as occurring during the year. In forty per cent. of these cases no one implicated was arrested. One hundred and thirteen cases and 207 criminals were brought before the District Police, Magistracy and the Courts during the year and of the summoned 41 criminals were alone punished. The Foujdaree Udalt observes on this report "an increase of 178 will be found in the number of persons pending and summoned for petty offences, while the total number of cases reported to have been committed during the year under review is the same as that reported in 1855, but there is a total decrease in the number of persons concerned, chiefly in those charged with housebreaking and cattle stealing." The Magistrate adds that "generally speaking, life and property are as well protected in this district as they are in those countries in Europe which boast of the highest civilization and of an improved system of police."

In Rajahmundry 15,179 persons were summoned for petty offences, amongst whom were only 296 accused of theft and cattle stealing. The village police dealt with 1,486 of the summoned, the district police with 13,491 and the Magistracy with 202. The percentage of punished to summoned was 112.

There were 709 cases of crimes and misdemeanors reported, of which ten were cases of murder, and 1356 persons were supposed to be implicated in the commission of the reported crimes. In 450 out of the 709 cases not a single person implicated was

arrested. On the whole during the year, 302 cases of crime and misdemeanor and 741 criminals concerned were examined. But of those examined only 155 or 20 per cent. were punished.

The Court observe that "in petty offences there was an increase of 2250 in the number of persons pending and summoned and an increase of 38 cases in crimes and misdemeanors as compared with that of the previous year. There is a decrease of the cases under the head of burglary, the main increase being under the head of theft. The returns shew that the village police have paid more attention to the duties devolving on them, as is evidenced by the increase in the number of petty offences."

The population of Masulipatam is estimated at 5,20,866 persons, the number of persons summoned for petty offences was 5169 and the reported cases of crime and misdemeanor were 571 in which 1170 persons were supposed to have been implicated. Of those summoned for petty offences 1894 were punished or 36 per cent. of the summoned. In 71 per cent. of the cases of crime and misdemeanor not a single person implicated was apprehended. One hundred and eighty-six cases and 370 persons charged with their commission were brought before the Magistracy, Police, and Courts, but 101 or 27 per cent. were alone punished. The compiler remarks upon the Magistrate's returns :—"The report exhibits an increase over last year of 436 persons charged with petty offences ; there is also a small increase in the number of persons whose cases have been dealt with by the village police. The Joint Magistrate in charge, however, is constrained to remark that these officers perform their duty in an unsatisfactory manner, and he anticipates no improvement until they are remunerated for the performance of their duties. Allusion is again made to the evils arising from the peculiar geographical position of the Madhera Pergunnah, which jutting in between the Frontier Talooks of the sub-divisions, affords an easy means of escape to marauders. This circumstance has, however, already been brought to the notice of Government in former reports. It is satisfactory to remark that in the more serious offences affecting property there has been a decrease in the number of cases as compared with those noticed last year."

Guntoor numbers a population of 5,70,083. During the year 1856, 9262 persons were summoned for petty offences and 413 cases of crime and misdemeanor were reported. The village police dealt with 886 of the petty offences, the district police with 8,206 and the Magistracy with 170. Sixteen per cent. of those charged with petty offences were punished. In 76 per cent. of the cases of crime and misdemeanor reported not one person implicated was arrested. During the year 128 cases were brought up for examination and 281 persons examined but 25 per cent. only were

punished. The report observes "in crimes and misdemeanors there is an increase of 34 cases over the number reported last year. The efforts of the police in this district appear weak and ill-directed as regards the detection of crime; their inefficiency has been frequently reported on by the Magistrate, who earnestly presses on the consideration of Government the necessity of strengthening it. That its efforts are attended with but little practical result is shown by the fact of 315 out of 413 reported cases remaining undetected."

In Cuddapah with a population of 14,51,921, four thousand two hundred and eighty-three persons charged with petty offences were summoned and 30 per cent. of them punished. Of the offenders summoned the village police dealt only with 17 and the Magistracy with 332. No less than 1,209 cases coming under the head of crimes and misdemeanors were reported during the year; in 56 per cent. of these cases none of those implicated were arrested. One thousand nine hundred and thirty-three persons accused of heinous offences were examined, but only 9 per cent. of the persons so charged were punished. The cases of murder reported were 33, shewing a decrease of 9 cases as compared with the returns of 1855.

On these criminal statistics the Foujdaree Udalt remark:—"The returns from this district for the year under review shew a decrease both in petty cases as well as the more serious crimes and misdemeanors. Crimes of a heinous nature against the person have decreased, the only noticeable increase being 29 cases of housebreaking. Of the property stolen by gang robbers a little more than $5\frac{1}{2}$ per cent is recovered: in that obtained by housebreaking about $\frac{1}{10}$. The Magistrate mentions two instances where the village officers, aided by the villagers, have successfully resisted the attacks made upon them by gang robbers, and that he has taken every opportunity of encouraging them in their defence of their persons and property. The explanation furnished by the Session Judge as to the detention of prisoners before him for more than 30 days, the Court consider not satisfactory."

The population of Bellary in 1856 was 12,29,599, the persons summoned for petty offences were 4,613 and the cases of crimes and misdemeanors reported numbered 1,266. Thirty-three per cent. of the persons charged with petty offences were punished, the village police dealing with 239 of those summoned, the district police with 4026 and the Magistracy with 348.

During the year 702 cases of crimes and misdemeanors were brought before the Courts, Police and Magistracy and eighteen per cent. of the 1,707 persons implicated were punished. Of the 1266 cases of heinous crime reported during the year, 54

per cent. were unable to be traced to the criminals. There were no less than forty cases of murder. The report closes with the following :—"It will be observed from this return that there is a decrease in the number of persons punished for petty offences, and a large decrease of 477 cases in crimes and misdemeanors committed during the year. Of this number, no less than 333 cases occur under the head of robbery by open violence. The Magistrate repeats his expression of the want of more European agency. He states, 'I cannot but think that more European officers are wanted, who having small districts, could at once be on the spot, and control and give energy to the native police officers, whose labours in detecting robbers are frequently frustrated by the unsatisfactory nature of the evidence, when the cases come before the Courts.' The reason assigned for the detention of prisoners beyond 30 days before the Session Court is any thing but satisfactory."

The returns from the district of Nellore shew that with a population of 9,35,690, nine thousand two hundred and fifty-five persons were summoned for petty offences and 2746 persons were supposed to have been implicated in 910 cases of crimes and misdemeanors reported. Of those summoned for petty offences twenty-six per cent. were alone punished and of the cases of crime and misdemeanor reported 49 per cent. were not traced. Five hundred and eleven cases were enquired into by the Police, Magistracy and the Courts, and sixteen per cent. of those implicated were punished. The remarks of the compiler upon these statistics are "the returns from this district exhibit an increase in the number of persons punished for petty offences, and a very slight decrease in the total number of crimes and misdemeanors. It is to be regretted that in offences against property, these returns exhibit an increase over those of last year; this increase more especially in the cases of highway robbery, the perpetrators of which the Magistrate states to be marauders from the Cuddapah district. The state of crime in this district as well as in the district of Bellary, has been specially noticed by Government, and explanations afforded by the local officers regarding its prevalence, and the measures they have taken for its suppression have been reported."

North Arcot had in 1856, 14,85,873 inhabitants of these 13,559 were summoned for petty offences and 6265 were reported as implicated in 1081 cases of crime and misdemeanor. Of those summoned for petty offences 22 per cent. were punished. The district police dealt with no less than 13,158 persons, the Magistracy with 163 and the village police with 238.

Seventy-four per cent. of the crimes and misdemeanors reported during the year were not traccable. The Police, Magistracy and Courts enquired into 330 cases and 13 per cent. of the offenders were punished. The remarks appended to the statistics are "the returns for the year under notice in respect to this district exhibit an increase in the number of persons punished for petty offences. In the number of serious crimes and misdemeanors there is a total decrease of 27 cases as compared with the returns of the preceding year, the principal decrease being in highway and gang robberies. These crimes were of most frequent occurrence in those parts of the district which it has been stated in former returns afford peculiar facilities for their commission and for the evasion of the robbers. The subsequent state of crime in this district at the commencement of the current year has been under the consideration of Government. The delay of persons charged with petty offences before the Police has not been accounted for, and is very unsatisfactory."

Chingleput has a population of 5,83,462 persons, of these 6,298 were summoned for petty offences and 1387 supposed to be implicated in 362 reported cases of crime and misdemeanor. Of those summoned for petty offences forty per cent. were punished. Forty-six per cent. of the crimes and misdemeanors committed were not brought home to the offenders. The Courts, Police and Magistracy investigated 253 cases of crime and punished twenty-six per cent. of the 618 persons arrested. There was only one case of murder in the district and the compiler remarks in the returns:—"It is satisfactory to observe a large decrease in the number of persons charged with petty offences. There is also a large decrease in the number of heinous offences committed during the year under review, which the Magistrate attributes partly to the comparative ease enjoyed by the people consequent on the more favorable nature of the season, and partly to the augmentation of the Police force temporarily sanctioned by Government in May, 1856, for a period of 6 months."

The returns from South Arcot exhibit a considerable decrease in the crime of gang robbery, shewing only 37 cases in 1856 to 101 in 1855. The Magistrate considers this satisfactory, attributing the decrease to the increased vigilance of the Police and the greater prosperity of the district. The persons summoned for petty offences during the year numbered 10,925 and of these 38 per cent. were punished. Eleven hundred and forty-nine cases of crime and misdemeanor were reported and three thousand three hundred and eighteen persons were supposed

to be implicated, but only 40 per cent. were apprehended. Six hundred and twenty-six cases were examined during the year under report and 15 per cent. of those implicated punished.

The Salem returns exhibit a decrease of persons punished for petty offences but an increase of those summoned. In the serious crimes there is an increase of 45 cases, the greatest increase being in gang robberies and housebreaking. The population of Salem may be estimated at 11,95,377. The number of persons summoned for petty offences was 13,228 and of these 24 per cent. were punished. The number of cases of serious crime reported was 1090, and the number of persons implicated supposed to be 3,659, of these 47 per cent. were not detected. The Magistracy, Courts and Police investigated during the year 626 cases and punished 15 per cent. of the persons apprehended as implicated.

In Coimbatore with a population of 11,53,862 persons, 10,863 were summoned for petty offences and 4868 reported as being implicated in serious crimes. Of those summoned for petty offences 47 per cent. were punished and of the reported cases of crime 1343 in all, 57 per cent. were never traceable. During the year, 659 cases were investigated and fourteen per cent. of the arrested punished. There were 29 cases of murder. To the returns the following remarks are appended :—" Though the returns for the year under notice exhibit an increase in the number of persons punished for petty offences, it is satisfactory to observe, in spite of the adverse seasons as noticed by the Magistrate, a considerable decrease in the more serious crimes and misdemeanors. There is an increase under the head of murder one case of which may be specially noticed. "In Suttimungalum Talook a wife and a husband had an altercation and quarrel between each other, when in a fit of rage the husband lifted up his two children aged $4\frac{1}{2}$ and 2 years, and dashed them on a stone, whereby the children were killed instantly. The man was arrested and sent up by the Police to the Criminal Court, but on his way to Coimbatore, he refused to take any sustenance for 2 days (probably as it appeared from the dreadful impression his own deed had made on his mind), and died before he reached the Court."

Trichinopoly numbers 7,09,196 inhabitants. The number of persons summoned for petty offences was 7,717 of whom 29 per cent. were punished. The number of heinous crimes reported was 478 and 1385 persons were supposed to be implicated, but 57 per cent. of the cases were never traced. The Police, Magistracy and Courts dealt with 293 cases and punished 16 per cent. of those apprehended as implicated. There were only seven cases of murder, but one "case of murder was attended with cir-

circumstances so extraordinary as would almost have induced a belief in the insanity of the prisoner, but for the strong evidence to the contrary. The victim of this murder was a boy of 16, who was sitting close to the high road when the prisoner came up to him, caught hold of him by the lock of hair at the back of his head, dragged him a short distance, severed the head from the body and drank the warm blood of his victim. The 2nd witness a lad of the same age as the deceased ran horrified to the village which was close by and gave the alarm. The 3rd, 4th and 5th witnesses immediately came to the spot and endeavoured to capture the prisoner; he threatened them with the bill-hook he still held in his hand as they went for further assistance. On their return they found the prisoner; cutting the head of the deceased open and eating the brains, on the witnesses again approaching, the prisoner fled leaving the bill-hook behind but keeping hold of the deceased's head which he subsequently threw at the 5th witness."

In Tanjore out of a population of 16,76,086 there were 17,625 persons summoned for petty offences and 1731 persons supposed to be implicated in heinous crimes. Of those summoned for petty offences 29 per cent. only were punished and of the 636 serious crimes reported 67 per cent. were not traced. The Magistracy, Courts and Police examined 257 cases and punished of the 642 persons apprehended as implicated, 27 per cent. The compiler remarks:—"The returns for the year under review exhibit an increase in the number of persons punished for petty offences. In the more serious crimes and misdemeanors there has been an increase of 64 cases over the number reported as having occurred during the year 1855. The great increase appears under the head of housebreaking, and this offence seems to have occurred more frequently towards the close of the year, thus swelling the returns under this head; no special reasons however are assigned by the Magistrate for the greater prevalence of this kind of crime at this particular season of the year."

In Madura with a population of 17,56,791 persons, 15,299 were summoned for petty offences and 1855 were implicated in heinous offences. Thirty-one per cent. of those summoned for petty offences were punished and out of 525 cases of serious crime reported 32 per cent. were not traced. The Magistrates, Courts and Police examined into 469 cases of crime in which 1419 persons had been apprehended as implicated, but of these only 15 per cent. were punished. The returns exhibited thirty-two cases of murder being an increase of 13 over the returns of 1855. The Magistrate notices that this crime "has been committed under circumstances of a peculiar nature—parties hire a bandy and bullocks, murder the driver, and proceed into another district,

where they dispose of the cart and bullocks—a conviction has been obtained in one case of this nature.”

The Tinnevely returns shew an increase of 107 under the head of crimes and misdemeanors as compared with the preceding year. For petty offences out of a population of 12,69,216 persons 6693 were summoned for petty offences and of these 34 per cent. were punished and 4020 persons were supposed to be implicated in 782 cases of reported serious crimes. The crimes examined into during the year were 539 and 12 per cent. of those arrested on suspicion were punished.

The Malabar district comprising those of Calicut and Telli-cherry has a population of 15,14,909. During the year under review 12,999 persons were summoned for petty offences and 22 per cent. were punished. There were 1,061 cases of heinous crime reported, in 236 of which no clue was ever obtained to any of the implicated. The Magistracy, Courts and Police examined into 890 cases and punished 20 per cent. of the 2,082 persons apprehended as implicated.

The Canara district has a population of 10,56,333. The number of those summoned for petty offences was 10,293 of whom 31 per cent. were punished. The number of heinous offences reported during the year was 632 of which 227 were not traceable. Four hundred and sixty-six cases were examined and 21 per cent. of the 1314 persons arrested as implicated punished.

The Ganjam Agent reports that during the year 4,745 persons were summoned in his agency for petty offences and 22 per cent. of them punished. There were 589 heinous crimes reported of which 70 per cent. were not traceable. The cases dealt with during the year amounted to 249 in which 1030 persons were supposed to be implicated, of those 21 per cent. were punished.

The detentions of 201 persons by the Agent for a period exceeding 30 days the Court of Directors do not consider satisfactory as no adequate explanation has been given.

The Vizagapatam Agent states that in his agency during 1856, 14,372 persons were summoned for petty offences and of these only nine per cent. were punished. Three hundred and forty-one heinous offences were reported during the year of which 60 per cent. were not traceable. One hundred and sixty-six cases were disposed of during the year but only ten per cent. of those who were arrested were punished.

In the Kurnool agency 1,794 persons were arrested for petty offences and one hundred and seven only punished. Three hundred and fifty-one heinous offences were reported and only 41 per cent. of them were traceable. Two hundred and fifty-one

heinous crimes were examined into, but of the 579 persons arrested on suspicion only 21 per cent. were punished.

TABLE shewing the relative proportion borne by the persons summoned for Petty Crimes and for Heinous Crimes to the Population.

1	2	3	4	5	6	7	8
	Population.	Summoned for Petty theft and other Petty Crimes exclusive of assault and abusive language.	Proportion to Population.	Persons implicated in Crimes and Misdemeanors.	Proportion to Population.	Persons implicated in cases involving grave injury to person or property.	Proportion to Population.
In 1855,	2,40,39,697	19,608	One in 1,226	78,271	One in 307	31,258	769
In 1856,	2,15,81,697	20,391	„ 1,053	70,234	„ 307	28,360	760
Increase,	...	783	...	...	...	...	...
Decrease,	21,58,000	...	168	8,037	...	2,898	9

The report here gives certain tables exemplifying still further the state of crime in the Madras Presidency in 1856, and the operation of the Criminal Courts. It appears from the reports that out of 1,83,982 petty offences disposed of by the Police, 9,550 were detained under a period of thirty days and 4,916 were detained above sixty days; out of 5,215 persons brought before the Magistracy 596 were detained under thirty days and 29 above sixty. The Police detained from a total of 21,031 persons apprehended for crimes and misdemeanors, 1,306 above thirty days, the Magistracy out of a total of 2,274 arrests 245 only above 30 days and the Courts from a total of 11,334 apprehensions 492 persons above sixty days.

The following table exhibits the number of Police charged with abuse of authority in 1856 :—

	Bribery.	Extortion.	Oppression.	Other abuse of authority.
Heads of Police,	12	11	4	11
Ameens of Police Cutwals, &c.,	4	3	3	8
Servants on the establishment of Heads or Ameens of Police,	32	21	5	14
Peons including Duffaldars, &c.,	57	47	45	41
Village Police including Heads of Villages as defined by Section 3, Regulation IV. of 1816, watchers, &c.,	86	133	112	231
Total,	191	215	169	305

Of these 880 officers 203 were punished 672 acquitted and 3 were maliciously accused, the undisposed cases were pending at the end of the year. In 1855 the number of police charged with abuse of authority was 1143. The number of malicious charges brought in 1856 against various persons was 853 to 1024 in 1855. Most of these malicious charges were made before the Police. The report contains tables shewing the results of various appeals to the Magistrates, Sessions Court and Foujdaree Udaltut from the subordinate Courts. The following is the abstract statement shewing the average number of days intervening between the apprehension, commitment and final sentence in the trials referred to the Foujdaree Udaltut :—

	1	2	3	4
	Total number of Trials.	Days between the dates of apprehension and final sen- tence.	Days between the dates of commitment and final sentence.	Days between the dates of the receipt of record by Foujdaree Udaltut and final sen- tence.
In 1855, ...	136	84	61	5
In 1856, ...	133	88	68	8
Increase, ...	...	4	7	3
Decrease, ...	3	...	...	...

JAILS OF THE MADRAS PRESIDENCY.-

Mr. Rohde, the Inspector of Prisons submits his report for the year 1856-57 to the Government of Madras on the 10th of November. During the year the Inspector of Prisons had directed his attention chiefly to the messing of prisoners, their punishment in the different jails for petty offences, the system of jail guards and of out-door labour. Mr. Rohde observes with regard to the latter of these heads that no material improvement in the condition of the prisoners can be looked for until in-door labour shall be universally adopted. With reference to the education of prisoners, Mr. Rohde had been requested to communicate with the Government officers of Bombay and Bengal as to the scheme of education pursued in those Presidencies. Answers were received from Mr. Thornhill and Dr. Mouat, which are in the report, as also an extract from Dr. Walker's report on prison education at Agra. Dr. Mouat's reply was short as he had not then matured any plan for the introduction

of education in the jails under his control and "did not see his way clearly to any material moral benefit from such schemes of prison instruction as could be safely or properly introduced in Indian jails at the present time." With regard to the lock-up houses Mr. Rohde observes that the space provided is very insufficient and in some men and women are locked up together. The report therefore suggests that there should be in every Cusbah station, "two male and one female ward, with spaces, at least 6 feet by 3 on the floor, for not less than 20 prisoners, with iron barred doors, ventilation from below, and a roof constructed without flat tiles, or with other aperture."

In the year 1856-57 there were 16,537 persons imprisoned for periods varying from one month to fourteen years, of which 10,152 were imprisoned for one month and 295 only for fourteen years. The average number of persons in confinement on any one day during the year as drawn up from returns published only twice a year was 5880, of these nearly three thousand were employed on the roads. The number of persons imprisoned for debt during 1856-57 was 630 and they were indebted on an average 21½ rupees a head. Of the prisoners about two-thirds could neither read nor write and not a fifth part could read and write well. There were only twenty escapes during the year. The expense incurred by the Madras Government in the maintenance of the jails and of the prison discipline and convicts was Rs. 3,13,095-10-10½. The deaths were 282 or about five per cent. of the average number at the jails, the cases of sickness were 15,013. The average number of sick at any one time was 686¼ or forty per cent. of the average number of prisoners. This average is of very little use as it is not struck upon the whole number of prisoners confined during the year the terms of their imprisonment being taken into consideration.

The report contains the rules for the management of public jails as drawn up by Mr. Rohde.

MILITARY COLONISTS.

Parliamentary Papers.

On the 9th May, 1856, the Court of Directors called the attention of Her Majesty's Government to the advantages enjoyed by Her Majesty's retired officers in settling on the Crown lands of any of Her Majesty's Colonies, these advantages not being

shared in by retired officers of the East India Company's services. In reply to this letter the Colonial Secretary stated that wherever Her Majesty had control, like privileges would be at once conferred on the Hon'ble Company's retired officers, but that with regard to the Cape of Good Hope, New South Wales, Victoria and New Zealand the control of the waste lands had been transferred by Act of Parliament to local legislatures.

This reply was dated the 27th June, 1856 and soon after a communication was addressed by Her Majesty's Government to the Court of Directors requiring to know whether it might not be practicable and desirable to hold out advantages to officers and soldiers retired or discharged from the Indian Armies to induce them to settle in those localities in India best adapted to Europeans. The communication was forwarded to the Governor General on 3rd September, 1856, and he directed the several local Governments to report on the matter.

On the 5th October, 1857 just one year after the date of the original communication the reports of the local Governments were forwarded to the Hon'ble Court of Directors. Sir John Lawrence, the Chief Commissioner of the Punjab stated that there was no arable land in the mountainous districts of the Punjab within British territory and in the valleys the climate was more or less insalubrious. Sir John Lawrence was of opinion that little could be done in the Punjab even by good agriculturists, without considerable capital.

The report from Pegu stated that though waste land was plentiful and the climate healthy yet except for capitalists who could command the labour of others there was no field for the occupation of the tilled land by Europeans.

Mr. Grcathed, the Commissioner of the Meerut Division apprehended "that the idea of inducing British soldiers or officers to locate themselves in the plains will not be entertained. The manual part of agricultural operations could not be carried on by Europeans in this climate, and the general character and social position of the pensioners from the ranks, who are to be found about our military cantonments, do not encourage a wish to see more of that class settled in India. In the transfer of landed property from the hands of the original proprietors that is going on throughout the country, it would be desirable to find a larger proportion passing under the proprietorship of Englishmen, but the successful management of an estate by an Englishman in India demands, besides capital, much strength of constitution and elasticity of spirit; and these qualifications are not likely to be found among officers who have passed the better part of their lives in the Indian service. Moreover, failure in management, and consequent default, would be visited by

the revenue laws by transfer or sale of the property, and the defaulter, if a Government settler, would find himself deprived, by the act of Government, of the property he had been encouraged to acquire. In Dehra Doon there is still a large portion of unappropriated land at the disposal of Government, and the climate is, in part of the valley, more suitable to the English constitution for out-door work. The eastern Doon, however, is so insalubrious that the idea of reclaiming it through the agency of natives of the country, except by gradual encroachments on its borders, has been abandoned. In the western Doon a colony of Portuguese and Anglo-Indians, discharged from Scindiah's military service, was planted at Herbunswala, and received much encouragement, but it languished and failed. The Englishmen who took grants of lands have, with one exception, either been compelled as public servants to give up, under orders of Government, or have seceded from the speculation; and at present the only thriving property in the Doon, under English management, is the tea plantation of Colonel Elwall, a retired officer, who has rented zemindaree lands, and carried on his operations without any assistance from Government. The grant terms might be altered to admit of the bestowal of the pecuniary advantage afforded to military settlers in Her Majesty's colonies, or a fee-simple title to plots of unappropriated land in the Doon, or rent-free tenure might be conferred on English settlers; but even under such conditions I do not anticipate that any real benefit would be conferred on the settlers or on the country, and I would recommend that colonization be left to private enterprise, unaided by special immunities."

The Commissioner of Kumaon, Mr. Ramsay reported that in his province there was no available land. The lands at the disposal of the Government were all covered with heavy forest and the waste land of the low valleys was unhealthy.

Captain James, the Officiating Superintendent of Darjeeling speaks in very high terms of the advantages to be gained by such a military colonisation as was proposed. He says:—"Looking, then, to the climate, the productions, and the facility of access to a ready market from these hills, there is little doubt as to the success of an attempt to introduce European settlers; their broken health will be speedily restored; they will see their children with rosy cheeks, rivalling those of the most favoured parts of Europe; they will be able to cultivate in their gardens those plants which are associated with home in their childhood; and they will find in the abundant crops around their dwellings, ample reward for the toil expended in their cultivation." Captain James also forwarded a paper with his report from Mr. Hodgson. Mr. Hodgson considered the Himalayas to be very

well calculated for the settlement of Europeans and was convinced that the encouragement of colonization therein was one of the highest and most important duties of the Government. He says:—"In the long gradation of heights, from the plains to the snows, every variety of climate is found, with correspondent capabilities for the successful culture of various products suited to the wants of Europeans; for their own consumption or for profitable sale. And in this extraordinary gradation of heights, the high and low are juxtaposed in a manner alike favourable to the labours of the healthful, and to the relief of the ailing. A healthy cultivator of our race could have his dwelling at 4 to 6,000 feet, and his farms both there and at various higher and lower elevations, yet still close to his abode, so that quasi-tropical and quasi-European products might be raised by him with the greatest facility, and in defect of health and strength the colonist, like the visitor, would enjoy the vast advantage of entirely changing his climate without cost and fatigue of journeying, besides having the additional resource of easy access to medicinal waters of universal diffusion, and of proved efficacy in many kinds of ailments."

The colonist might thus locate himself on any elevation he found conducive to his health, on the verge of the lower regions he would command the greatest resources for traffic in timber, drugs, dyes, hides, horns, glue and textile materials. If the colonist settled further from the plains he might devote himself to agriculture and sheepbreeding. Mr. Hodgson however does not hold out to the colonist the prospect of growing rich "but would rather fix his attention, primarily at least, upon the certain prospect of comfort, of a full belly, a warm back, and a decent domicile; or, in other words, of food, clothes, and shelter for himself, his wife, and children, unfailing with the most ordinary prudence and toil, and such, as to quantity and quality, as would be a perfect godsend to the starving peasantry of Ireland and of the Scotch Highlands. These are the settlers Mr. Hodgson would, not discouraging the others, primarily encourage by free grants for the first five years, and by a very light rent upon long and fixed leases; then, after looking to compensation in the general prestige of their known forthcomingness on the spot, and assured that, with the actual backing upon occasions of political stress and difficulty of some 50,000 to 1,00,000 loyal hearts and stalwart bodies of Saxon mould, our empire in India might safely defy the world in arms against it."

Colonel Jenkins reports on the Cossyah and Jynteah Hills in the north east Frontier Agency, that these ranges afford most eligible retreats for retired officers of moderate circumstances who would employ themselves in farming the land.

Mr. Allen, the Commissioner of Chota Nagpore, states that under his superintendency, there is no locality adapted for the settlement of Europeans.

In the Madras Presidency reports were sent in from the Ceded Districts, Mysore, the Southern Division, the Neilgherries, Malabar and Canara, and the Northern and Centre Divisions. The places regarded as eligible for European settlers are the Neilgherries, the Pullaney, the Sillimalley and Shevroy hills, the Mungerabad gorge in Coorg, Manantoddy and the Western Ghauts, Coortallum in the Tinnevely district and Palmanair. The Madras Board of Revenue in transmitting these local reports to Government remark that to encourage colonization besides a remission of the purchase money, it would be necessary to give the fee simple of land or at least to grant long leases. As regards European soldiers it would be desirable to locate such settlers in the neighbourhood of places like Ootacamund and Coonoor where they could readily obtain a market for their produce, medical aid, and generally, means of providing in comfort for their families.

Lord Elphinstone in transmitting the reports of the local officers of the Bombay Presidency states his own opinion on the subject of colonization. He says:—"There are no tracts suitable for colonization by Europeans under this Presidency, and that the expediency of encouraging Europeans to occupy land as cultivating colonists is very doubtful; but at the same time we consider that European capitalists, or houses of agency scattered through the Presidency, would tend greatly to ameliorate the condition of the country by becoming purchasers of agricultural produce, and giving the cultivators the advantage of a more equitable system of dealing than they can now command from native capitalists."

Lieutenant Colonel Jacob, Acting Commissioner in Sind reports the climate so hostile to the European physical constitution as to preclude the possibility of Europeans dwelling permanently in Sind without wholly degenerating.

The late Collector of Broach, Mr. Inverarity observes that where the climate would admit of the settling of Europeans they should not be tolerated until the settlers were made amenable to the same jurisdiction as the natives in all civil and criminal matters.

Mr. Reeves, the Revenue Commissioner of the Southern Division, transmits a somewhat lengthy memorandum. He admits that settlers would succeed, but as merchants rather than as farmers and would expect as the first fruits of European colonization a great amount of evil to the natives from the vicious example and tyranny of the settlers, and that European pau-

perism would have to be contended against. Mr. Reeves too thinks that the natives of India should be left alone, and that it is better that natives rather than Europeans should possess the land.

Mr. Seton Karr reports that in the Belgaum Collectorate, there is not a sufficiency of good waste land. As this disposes so far as Belgaum is concerned of the question, Mr. Seton Karr merely observes that generally speaking he thinks "the country would derive a good deal more advantages than the colonists" from any settlement.

The Commander-in-Chief of the Bombay Army considers that all reason is against the transformation of worn out officers and soldiers into successful agriculturists, but His Excellency imagines that the hill stations of India would meet the wishes of those discharged officers and soldiers who would be satisfied to dream away their days in mere existence without aim or interest. The Commander-in-Chief supports his opinions by the observation that "emigration to Australia, whose climate is more congenial to the constitutions of Europeans than that of India, having proved a failure, and labour, while compared with the prices of the necessaries of life, being now as valuable in England as in the colonies, it is probable that the same system and failure would prevail were the hilly parts of India thrown open to the European officers or soldiers."

Colonel Melville, the Military Secretary to Government expresses generally the same opinions as the Commander-in-Chief and in addition thinks that it would be very prejudicial to the interests of every regiment to have temptations freely offered to the best men serving in its ranks to take their discharge and leave it. The opening of a settlement in India would inflict very grave injury both to the discipline and efficiency of all European regiments in India. If it is determined to establish a system of colonization then it will require to be placed on a larger basis than the proposition under review. Discharged soldiers and their officers might be induced to assist and join such colonies, but the initiative should be taken rather by the Civilian than the Military classes.

FURTHER PAPERS ON THE DESPATCH OF TROOPS TO INDIA.

Parliamentary Papers.

ON the 7th of August, 1857, a letter was received by Sir George Grey, Governor and Commander-in-Chief, Cape of Good

Hope, from Lord Elphinstone, the Governor of Bombay. The letter was dated the 29th June, 1857. It placed his Excellency in the possession of the principal events connected with the insurrection in India, and requested that two regiments of infantry should be sent to Bombay. Lord Elphinstone did not ask for more troops, though had four regiments of infantry and three companies of artillery been sent to Bombay, the ordinary peace establishment would only have been completed, because had the Cape Government more men to spare it would be advisable that they should be sent to Calcutta direct. In accordance with Lord Elphinstone's letter, the Governor at the Cape transmitted two regiments to Bombay, one regiment with some artillery to Calcutta and one regiment to Ceylon. The artillery was sent fully horsed and £60,000, the whole of the specie in the Colonial chest was forwarded to the Supreme Government of India. After the despatch of these troops, on the 26th of August, a despatch dated 29th June, 1857, was received from the Colonial Secretary, directing that one regiment of infantry should be sent from the Cape to Calcutta. But this had already been done, and therefore at that time no more troops were sent, especially as on the 21st September, a despatch was received from the Governor General of India, dated the 21st of July, which did not even allude to the disturbances prevailing in India, and merely requested aid in the matter of purchasing horses. The Government of India required 1,000 horses, and to furnish these Sir George Grey had received instructions from the Home Government. Meanwhile, the Government of Bombay had written to the Governor of the Cape requesting a supply of horses, and sent two ships, the *Persia* and *Ocean Monarch* for their reception. It was impossible to comply with this request without failing to send a sufficient number to Calcutta, but as there was a demurrage of £38 a day on the *Persia* from the time she arrived, and a demurrage of £15 a day on the *Ocean Monarch* from the tenth day of her arrival, Sir G. Grey determined to embark two hundred and eighty of the Calcutta horses for Bombay. This was accordingly done and then there were 400 horses wanted to complete the Calcutta demand.

Thus matters stood in the beginning of October, the Bombay Government had asked for two regiments and had received them, the Supreme Government had asked for no aid save in the matter of the purchase of horses and had received one regiment and some artillery. A despatch had been received from the Home Government directing that a regiment should be sent to Calcutta and another to Ceylon, this letter, however, had already been anticipated. But about the middle of October a despatch arrived from the Home Government dated the 26th August "trusting

that His Excellency had been able to spare six regiments." In answer to this despatch Sir George Grey pointed out on the 2nd of November that there were but 6,265 rank and file including Natal under his command, but expressed his determination to send if possible larger reinforcements to India than he had already unauthorisedly sent. Again on the 5th of November in reference to this despatch of the 26th August from Mr. Labouchere, Sir G. Grey stated that he did not consider the instructions so applicable as those contained in the despatch from the Colonial Secretary of the 1st August, he therefore proposed to send at present no more regiments to India than those he had already despatched, namely the 89th, 95th, 13th, 80th and 60th with a detachment of royal artillery.

On the 11th of November Sir G. Grey notified to Mr. Labouchere the arrival of the *Himalayah* from Calcutta for the purpose of carrying between three and four hundred horses and on the 14th November he mentioned that the Supreme Government had not put on board either groom, Veterinary Surgeon or other persons to take charge of the horses. Fortunately the steamer *Hydaspes* with a strong detachment of royal artillery for Point de Galle was then lying in Simon's Bay and Lieutenant Colonel Riddell, R. A., transferred to the *Himalayah* a complete battery including a Veterinary Surgeon to take charge of the horses. The *Himalayah* was thus enabled to sail by the 6th of December, she carried however only 250 horses.

On the 19th August, Colonel Birch, the Military Secretary to the Government of India, requested that 200,000 lbs. of kiln dried flour should, immediately after the receipt of his letter, be sent to Calcutta for the use of the Commissariat Department, and a further supply after the interval of six months. The letter was received in November, and Sir G. Grey stated in a despatch, dated the 11th of that month, that he intended to forward the whole quantity at once. On the 20th November, 160,000 lbs. of biscuit were despatched to Calcutta in the *Oceanic*.

On the 28th December, Sir George Grey reports that since the intelligence of the outbreak in India had reached the Cape, fourteen transports conveying troops, horses, and mules had been sent or were fitting out, and that in addition eight transports sent by the Indian Government to the Cape had received both troops and horses, and had returned.

In reference to these despatches from Sir G. Grey, Mr. Labouchere in a letter to the former, dated the 5th February, 1858 said :—" I am not insensible to the weight of the reasons which you allege for not having fully carried into effect the instructions of Her Majesty's Government in regard to the number of

regiments which you were to send from the Cape; and I am unwilling to urge you to weaken the military defences of the colony beyond what in your deliberate judgment you may consider indispensable to its security. You will, however, bear in mind that any troops that you can spare will assuredly be readily provided for and usefully employed in India; and Her Majesty's Government rely with confidence on your assurance that you will afford to the utmost extent of your power such assistance to the Government of India as circumstances will admit of."

On the 5th March, the Right Honorable Lord Stanley informed the Governor Sir G. Grey that the reserve battalion of the 12th Foot would be withdrawn from the Cape without relief. On the 13th March, Lord Stanley intimated that the Court of Directors of the East India Company had expressed their approbation of the proposed arrangements for the despatch of horses to India, and on the 23rd March, Lord Stanley signified the approval of Her Majesty's Government.

On the 14th December, the Governor of Ceylon informed Mr. Labouchere that arrangements had been made to forward from Ceylon H. M.'s 80th regiment then expected from the Cape to Calcutta. Sir Henry Ward mentioned that he had made this arrangement contrary to the wishes of the Major General Commanding. The correspondence with the Major General is enclosed with the despatch. Sir H. Ward received the following acknowledgment from Mr. Labouchere:—"I have to acknowledge the receipt of your despatch, with enclosures, reporting that you had made arrangements for the immediate departure of the 80th regiment for Calcutta on its arrival at Ceylon from the Cape of Good Hope. In fully approving the course you have adopted in this instance, I have to express the cordial acknowledgments of Her Majesty's Government of the steps taken by you, as reported in your present and previous despatches, for strengthening the hands of the military authorities in India during the late pressure of events in that country."

Governor Stevenson of the Mauritius forwarded on the 5th of October to the Colonial Secretary a letter received from the Governor of the Isle de la Réunion with the reply of Major General Hay in command of the troops at Mauritius. The letter from the French Government proposed to place certain troops at the disposal of the Government of the Mauritius to prevent any rise in that island. The offer was declined, but Mr. Labouchere directed the Earl of Clarendon to convey to the French Court a suitable acknowledgment of the favour. Amongst the enclosures forwarded by the Governor of Mauritius to the Colonial

Secretary is a brief statement of the partial burning of the *Sarah Sands* conveying the Head Quarters of H. M.'s 54th regiment.

CIVIL DISPENSARIES OF THE MADRAS PRESIDENCY.

Madras Records, No. XLVI.

THE report is for the year 1856 and details the general operations of the medical officers in charge of the several dispensaries and their beneficial results. In forwarding the report Dr. Lorimer, the Secretary to the Military Board remarks:—"During almost the entire year, scarcity of food continued to be felt more or less throughout almost all the provinces, as in the preceding year; but notwithstanding, it is consoling to observe, that with the exception of Trichinopoly, Cuddapah, and Nagpore, where rather severe outbreaks of cholera were experienced, and Honore and Madura, where epidemic fever, peculiarly fatal, existed for two or three months, the various other Collectories and districts have been unusually healthy and free from epidemic disease. At Trichinopoly, cholera has for several years made its appearance at a certain season of the year, apparently connected with the large concourse of people who assemble about the month of January for the feast at Seringham. In most of the districts very extensive public works continue to be carried on with great activity, and their beneficial influence in diminishing sickness by giving continuous employment to thousands has been noticed by many of the medical officers in their reports. Yet notwithstanding the healthy state of the presidency generally, and the comparative freedom from epidemic disease, the number of applicants for aid and advice at the civil dispensaries has very greatly exceeded those of the preceding year; the total number treated has amounted to 2,10,566, *viz.*, 11,276 in-patients, and 1,99,290 out-patients; an increase of 26,197 over the number in 1855." The accompanying table gives a general view of the state and working of the several dispensaries with their cost :—

COMPARATIVE VIEW of the number of sick treated in the Civil Dispensaries for the undermentioned years:—

			1844.	1850.	1856.	Expenses incurred in 1856.	
						Rs.	As.
Bellary, ...	...	...	40	188	106	1,585	6
		{ In-Patients.	862	1,385	3,687		
		{ Out do...					
Black Town, North of, ..	...	{ In do...	8,890	11,098	12,184	714	0
		{ Out do..					
Calicut, ...	...	{ In do...		126	305		
		{ Out do...		1,402	4,800	2,311	0
Chicacole, ...	...	{ In do...		63	246		
		{ Out do...		826	3,284	2,004	13
Chingleput, ..	...	{ In do...		50	225		
		{ Out do...		855	8,573	1,739	6
Chintadrepetta, ...	...	{ In do...					
		{ Out do...	6,276	11,431	12,216	1,116	0
Chittoor, ..	...	{ In do...		99	166		
		{ Out do...		1,612	7,483	1,906	6
Cochin, ...	...	{ In do...		8	405		
		{ Out do...		90	4,449	2,118	0
Coimbatore, ...	...	{ In do...		5	212		
		{ Out do...		284	5,456	1,291	5
Combaconum, ...	...	{ In do...	121	186	354		
		{ Out do...	3,241	2,693	4,023	1,453	13
Coonoor, ...	...	{ In do...			78		
		{ Out do...			1,370	745	5

Cuddalore,	...	...	...	{ In do. }	...	78	204	1,889	11	2
				{ Out do. }	...	1,167	8,481			
Cuddapah,	...	...	...	{ In do. }	137	138	178	1,589	4	6
				{ Out do. }	520	1,727	2,614			
Guntoor,	...	...	...	{ In do. }	...	90	332	2,328	7	10
				{ Out do. }	...	1,146	3,748			
Honore,	...	...	...	{ In do. }	...	...	145	1,481	9	2
				{ Out do. }	...	...	4,623			
Kamptee,	...	...	...	{ In do. }	...	64	437	1,554	1	6
				{ Out do. }	...	158	1,879			
Kurnool,	...	...	...	{ In do. }	...	115	165	1,702	5	4
				{ Out do. }	...	3,720	12,636			
Lying-in-Hospital (Government),	...	...	...	{ In do. }	...	...	574	604	8	0
				{ Out do. }	...	...	5,049			
Do. (Dr. Scott's),	...	...	...	{ In do. }	...	196	...	0	0	0
				{ Out do. }	...	7,914	...	0	0	0
Madura,	...	...	...	{ In do. }	134	386	488	1,835	1	8
				{ Out do. }	434	2,105	4,984			
Mallipooram, ...	...	...	...	{ In do. }	...	...	124	316	1	10
				{ Out do. }	...	...	563			
Mangalore,	...	...	...	{ In do. }	...	54	205	1,483	11	10
				{ Out do. }	...	1,938	5,601			
Masulipatam, ...	...	...	...	{ In do. }	54	65	197	2,135	6	5
				{ Out do. }	413	2,506	8,544			
Mercara,	...	...	...	{ In do. }	...	...	31	1,029	0	8
				{ Out do. }	...	...	2,544			
Carried forward,	...	...	...	{ In-Patients. Out do. }	486 20,636	1911 54,117	5177 1,28,691	34,935	0	3

COMPARATIVE VIEW of the number of sick treated in the Civil Dispensaries for the undermentioned years:—

			1844.	1850.	1856.	Expenses incurred in 1856.	
			In-Patients.		R.	As.	P.
			{ Out do. ... }	{ In do. ... }			
Brought forward,	...	...	486	1911	5177		
Nellore,	...	...	20,636	54,117	1,28,691	34,593	3
	...	...	66	193	287		
	...	...	759	1,447	6,067	2,547	11
Ootacamund,	...	...	...	62	656		
	...	...	...	227	2,381	2,799	7
Palamcottah, Friend in need Society at,	{ In do. ... }	{ Out do. ... }	...	...	93		
	{ In do. ... }	{ Out do. ... }	...	...	576	0	0
Rajahmundry,	...	...	...	22	400		
	{ In do. ... }	{ Out do. ... }	...	79	1,154	3,063	5
Raneepett,	...	...	...	...	222		
	{ In do. ... }	{ Out do. ... }	...	...	3,268	2,865	2
Salem,	...	...	...	86	128		
	{ In do. ... }	{ Out do. ... }	...	2,044	2,702	1,304	6
Secunderabad,	...	...	...	...	1,464		
	{ In do. ... }	{ Out do. ... }	...	...	7,137	4,952	9
Tellicherry,	...	...	...	24	...		
	{ In do. ... }	{ Out do. ... }	...	424	957	0	0
Tinnevely,	...	...	...	37	231		
	{ In do. ... }	{ Out do. ... }	...	393	4,691	2,088	0
Trichinopoly,	...	...	254	511	421		
	{ In do. ... }	{ Out do. ... }	1,146	2,645	10,741	247	5
Triplicane,	...	...	68	333	986		
	{ In do. ... }	{ Out do. ... }	3,091	8,134	13,054	4,248	7

Vellore, ...	...	...	...	{ In do. ... Out do. ... }	...	...	...	266 { 4,850 }	1,860	4	8
Vepery, ...	...	...	...	{ In do. ... Out do. ... }	...	...	...	670 { 7,953 }	4,165	13	10
Vizagapatam, ..	...	...	...	{ In do. ... Out do. ... }	...	...	...	275 { 5,068 }	2,355	10	0
Total,				{ In do. ... Out do. ... }	874 25,634	3,556 79,278	11,276 { 1 99,290 }		69,534	11	1
Grand total of sick treated, ..				..	26,508	82,834	2 10,566				

"Of those treated during the year as out-patients 1298 were Europeans; 10,035 were Eurasians; 1,47,433 were Hindoos; and 33,546 were Mahomedans. Of the in-patients 42 were Europeans; 70 were Eurasians; 8677 were Hindoos and 1446 were Mussulmans. Amongst the European in-patients 5 per cent. were females; of the Eurasians 48.9 per cent. were females; of the Hindoos 52.1 per cent. were females and of the Mussulmans 59.3 per cent. were females. The percentage of females to males in the European out-patients was 38.9; in the Eurasian out-patients was 62.2; in the Hindoo out-patients was 37.008 and in the Mussulman was 34.2. On the whole there were 38.3 females out of every hundred males treated either as in-patients or out-patients during the year under review. The foregoing returns do not of course include those from the Lying-in-Hospital.

In the General Hospital 1,331 patients were treated, of which 94 cases ended fatally, or a little more than 7 per cent.; there were only sixteen admissions for cholera, ten of which were fatal. It is remarked in the report "that 'the hospital continues to be of great service to the poor of all classes; the cases are furnished from a wide circumference of the surrounding neighbourhood, and not particularly by the adjacent parts of Black Town.'"

One hundred and seventeen patients were under treatment during the year in the Leper Hospital. Of this number 35 were discharged greatly relieved, 14 died and 68 remained at the close of the year under treatment.

On the Native Infirmary, "the medical officer in charge observes: 'though pauperism has been painfully rife, yet the year just closed has not been a sickly one.' Small pox and cholera shewed themselves at the end of January and throughout February in some parts of the district, but not to such extent as to call for notice; 16 cases of small pox only are recorded, *six* of them in persons *unprotected by vaccination*; two ended fatally, three of the six were confluent. Of cholera, 20 admissions appear, of which number 15 died, or 75 per cent. Many of the cases were picked up in the streets in a dying state. From all diseases 1,083 have been treated during the year, of which 217 died; both the sickness and mortality have been somewhat less than usual. The mortality has resulted chiefly from chronic ailments of long standing, and often complicated; phthisis 16, bowel complaints 39, dropsies 16, atrophy 30, from these diseases alone 101 casualties;—under the head old age 56 deaths appear."

In the Idiot Asylum attached to the Native Infirmary 163 individuals were accommodated, 114 males and 49 females. Seven were discharged as sane, thirty-five taken out by their friends,

32 died and at the close of the year, 78 remained. The report observes :—"An increased allowance of animal food has been issued to the inmates of the asylum during the year, the effect of which has been very beneficial. The mortality, however, is still high, 19 per cent.; last year it was 22; general atrophy, diarrhœa, epilepsy and apoplexy, have been the most frequent and fatal forms of disease amongst them."

The aggregate strength of the House of Industry was 314, of which number 105 were admitted to the sick ward and ten died.

In the Male Asylum from an average strength of 224 boys, the admissions from all complaints were 463, of these only one died.

In the Female Asylum there was not a single casualty throughout the year from a strength of 211. The average daily sick was eight.

Mr. Lovell reports of the Bellary Dispensary :—"I have reason to believe, that the natives of this district, as well as in the zillah of Cuddapah, are fully alive to the great benefits, which these institutions are capable of conferring on suffering humanity; and more especially to the poor classes of the community, and in surgical cases in particular; in proof of which, independent of my experience in this zillah, during the past six months, I may here mention the fact, of my having established an hospital in my own compound, capable of accommodating a good number of applicants for aid in surgical cases, who came to me from far and near, and some from Bellary, for the purpose of undergoing surgical operations, whilst I was zillah Surgeon of Cuddapah, during the years 1835 to '38 inclusive: proving, without doubt, that distance deterred them not. Since I have held medical charge, the diseases generally, which came under observation and treatment, were such as are incidental to, and very common amongst, the poorer classes; and but too often arising from vice and debauchery, and aggravated by neglect and starvation, or ill-feeding, destitution, and deficient clothing; and many of the poor seek relief as much from the latter cause, destitution, as for the relief of bodily ailments."

A table shewing the number of surgical operations and their results is appended.

Assistant Surgeon J. Paul of the Black Town dispensary says that very great improvement has been effected in the health of the locality by filling up an open ditch on the west side of the Fort but reports that much remains to be done as far as the drainage of Black Town is concerned. The report contains a list of the surgical operations performed during the year. One portion of the duties of the medical officer consists in attendance on Coroner's inquests. During the year "24 inquests were held on sud-

den deaths from accidents, such as the falling of houses, sheds, walls, carriage accidents, bites of animals and the like, and 15 were cases of suicide, for which object drowning seems the favorite mode of death; 2 cases of murder occurred by stabbing, one culprit paid the penalty of his crime with his life, and the other was transported. Four of the inquests were on new born infants exposed in drains and heaps of rubbish, but in none of the cases could the crime be brought home to the guilty parties."

Mr. E. S. Cleveland of Calicut reports a steady progressive increase in the attendance at the dispensary since its establishment in 1845. On first taking charge Mr. Cleveland was perplexed "at the number of hopeless cases, especially of anasarca, that were presented for admission. During the inclemency of the monsoon weather, victims of starvation and disease, beyond all hopes of recovery or relief, were daily picked up by the police and others in the public thoroughfares, and brought to the dispensary for shelter and treatment (of many of whom no account could be furnished), these, under the circumstances, were indiscriminately received, and very generally died a few days after admission."

The report contains a table of the surgical operations and the treatment and diagnosis of several cases.

Assistant Surgeon Windus reports the satisfactory working of the Chicacole dispensary and annexes a table of the surgical operations.

The dispensary at Chintadrepettah has no accommodation for in-patients, this Mr. J. McKenna, M. D. states in his report greatly limits the usefulness of the institution.

Assistant Surgeon Harper in his report states the number of surgical operations performed, the expenditure and the patients treated at the dispensary of Chittoor. He gives the history of some interesting cases which shew the quackery sometimes resorted to by the native practitioners. Amongst others one "is recorded under the head of "ulcus grave" of an unfortunate young woman, who had been run over 12 days previous to her coming to the dispensary. The bones of the leg had been fractured a little below the knee, and the village potter had been called in, mortification followed, and as the pain she suffered was great, she had been kept for four days perpetually drunk. Arrack had been given without measurement, when she was not in a state of insensibility—she came to hospital labouring under incipient delirium tremens—a rapid pulse and dry tongue. A sloughing sore from about the lower third of the thigh to below the knee. Morphia was administered with partial success in soothing her, and the second night after her admission she slept two or three hours and was

tolerably quiet during the day. The dresser reported that in the afternoon, whilst he was applying a poultice to the stump, she raised herself with a sudden shriek, and fell back dead."

At Cochin Mr. Pringle reports the dispensary buildings to be substantial and in good repair. "The building is completely divided into 2 wards, for males and females respectively, with separate privies and bath-rooms attached to each, securing the privacy of the sexes."

Since the establishment of the dispensary there has been a steady increase in the number of applicants for relief. The native physicians pretend to a great skill in rheumatism, fever, anasarca, female complaints and eye diseases, but when they find the sick have no money to spend they recommend them to go to the dispensary.

The report of Assistant Surgeon Joseph on the Combaconum dispensary contains nothing of interest. The number of patients and the cost of the institution can be found in the table given at the beginning of this analysis.

Mr. Maitland of Coonoor appends no remarks to his bare statement of the number of patients and expense incurred at the Coonoor dispensary.

Mr. Crawford regards the working of the Cuddalore dispensary as satisfactory. He considers that this result is partially due to having printed notices explaining the nature and object of the institution circulated amongst the people. At present however it is only the poor and destitute who seek the hospital, but a hopeful change "is going on in the minds of the people regarding these institutions."

Assistant Surgeon Peterkin of the Cuddapah dispensary mentions that during the year there has been a much larger admission than under any similar period of time. Two applicants for amputation were subjected to the operation in the course of the year. One was a middle aged "Hindoo woman, who had suffered much of inconvenience for some years from 'elephant leg,' which she found so much to interfere with her activity of movements, that she begged to have it removed; the disease had invaded the leg so high up, that it was deemed advisable to amputate in the lower third of the thigh. The lateral double flap operation was very satisfactorily performed by Assistant Surgeon J. A. Cox, M. D. then attached to the regiment stationed here (37th Grenadiers), and succeeded very well. The poor woman went out quite well and happy, evidently grateful too, for having been relieved of a troublesome burden, thirty-five days after the operation."

There were several other very interesting cases, but a table shewing surgical operations is appended.

Assistant Surgeon Fletcher remarks that the health of the people in the Guntoor district is improving. This he attributes to the fact that dry cultivation is rapidly giving way to the cultivation of rice now rendered possible by the opening of channels for irrigation from the Kistnah anicut.

Several amputations were performed, amongst others recorded is the following :—"A girl, aged 12 years, was admitted on the 13th December, with mortification of right forearm, consequent on native mal-treatment of a simple fracture of lower end of humerus, which was caused by a fall three weeks before; the hand was black and shrivelled, and a large sloughing wound extended to some distance above the fracture, through which the bone projected, chloroform was administered, and amputation of the arm performed, union by the first intention took place, and patient is now nearly recovered."

Assistant Surgeon H. Montgomery reports on the dispensary at Honore that the progressive number both of in and out-patients is highly satisfactory. During the year an entry was made of the village where each patient habitually dwelt and it was found that for a circle of 40 miles round scarcely one village of importance failed to supply cases of epidemic fever.

At Kamptee the Surgeon Mr. J. Maillardet reports that the principal diseases treated at the dispensary throughout the year were of the stomach and bowels, fever and epidemic cholera. Only two capital operations were performed, the left mamma of a woman being removed for cancer and the removal of the leg below the knee in a woman who some days after the operation was prematurely confined. Both cases recovered. On one case the Surgeon remarks :—"Death was the result of a sloughing ulcer in the chest of a male patient, a villager of middle age. On admission he had lost the greater part of one side of the face, which presented a horrible aspect, and phagedæna went on unchecked by nitric acid, the hot wire, charcoal, &c. He finally died from exhaustion, and extension of the sloughing backwards to the gullet and air passages. The cause of affection was stated to have been the application of some corrosive substance to a common boil in the cheek by some native practitioner, so that this patient may be added to the number of victims who perish annually through the gross ignorance and incapacity of this class of men; with regard to whose dealings both in the administration of medicines, and I fear of poisons, a greater amount of surveillance than now exists ought certainly to be exercised."

It is recommended that Lock Hospitals should be established at all large stations of the army "as numbers of cases of syphilis, gonorrhœa, and other diseases of venereal origin in females" fell under treatment during the year.

Mr. Rogers has much gratification in reporting the prosperity of the Kurnool dispensary. Admissions for ophthalmia were very frequent during the year and another Dresser was urgently required. To the report is appended a table of surgical cases.

Surgeon Shaw, F. R. C. S., reports that the expenses of the Lying-in-Hospital during the year were Rs. 604-8. Of in-patients 574 were treated and of out-patients there were 5049.

Mr. Colebrook accounts for the decrease of the in-patients at the Madura dispensary by the very great extent of cultivation throughout the district in the year under review. There were nine cases of the Madura foot admitted all of which required amputation. In every instance those who suffered from "the foot" lived on black cotton soil. Under the head of *morsus anguinum* the case of a girl aged 18 is reported. When she was admitted "the whole of the left foot was found to have sloughed away, leaving the tibia and fibula exposed to about the middle, and she had trismus which supervened the day prior to admission. This horrible condition was caused by the native doctor having applied some violent remedies to her foot for a snake bite recently received, she died the following day, a victim, amongst the many it is to be feared, to native quackery."

A list of surgical operations is appended.

Assistant Surgeon W. Furnell makes no remarks on the working of the dispensary at Malliapooram.

Mr. John Brett reports that the applications for medical aid at the Mangalore dispensary shew an increase over those of the preceding year. Amongst the cases brought for treatment were eight cases of poisoning. The poison taken was camphor dissolved in cocoanut oil. None of these cases proved fatal, they were cured by brisk sulphate of zinc emetics, cold water douche applied to the head and afterwards a purgative.

At Masulipatam, the principal diseases treated in the dispensary were fevers, diseases of the lungs, and bowels, skin diseases, diseases of the ear and rheumatic affections. Of the latter a great many were complicated with secondary syphilitic affections.

The Assistant Surgeons at Mercara and Nellore report the satisfactory working of the dispensaries under their care.

Dr. Lloyd reports that at the Ootacamund dispensary the principal diseases were dysentery, diarrhoea, catarrhus, rheumatism and common fever. The people at Ootacamund especially at monsoon time "suffer intensely from the cold and wet, and numbers of them are brought into hospital half dead from starvation and deficiency of clothing and food, which, as may be expected, lays the foundation of serious and tedious abdominal as well as pectoral complaints."

On the dispensaries at Palamcottah and Rajahmundry no very interesting remarks are made by the medical officers in charge. There is a marked prejudice against the latter dispensary by the higher classes in the district.

At Raneepett, Apothecary King reports that the applications for admission have increased. A list of surgical cases is annexed.

Surgeon H. R. D. Marrett reports on the dispensary at Salem and appends a list of surgical operations.

At Secunderabad, Mr. Cornish reports that during the cold season admissions from rheumatism were very common. Fish liver oil was found to be a valuable remedy in this class of diseases. A large number of cases of venereal affection were treated with marked success as also were abscesses and ulcers. "The dispensary continues to be regarded by the natives as a popular institution."

Mr. West, the Assistant Surgeon at Tellicherry appends no remarks to his report.

Mr. Clementson reports the following case as being treated at the Tinnevely dispensary:—"A boy aged 14 upon admission had the phalanges and metacarpal bones, the greater portion of the radius and ulna and a considerable portion of the lower end of the humerus of the left side, exposed from sloughing of the soft parts. The patient a poor emaciated little boy in very feeble health, had, it appeared some ten days before admission, sustained a fracture of the left humerus, the fracture having been tightly bound up by a native doctor, led to the lamentable result above detailed. The soft parts which remained, were in a sloughy state, but retaining their vitality; after having been for some time upon generous diet with wine and gained flesh and strength, the arm was amputated by Assistant Surgeon McDonald, the patient being under the influence of chloroform, very little blood was lost and he made a rapid recovery."

A list of surgical operations is given in this report.

The dispensary at Trichinopoly is reported by Mr. W. G. Davidson as being a great blessing to the neighbourhood, especially in surgical cases. The report contains a list of the surgical operations performed.

Mr. Cleghorn thinks that the benefits of the Triplicane dispensary are more and more appreciated by the natives. There were many sanitary improvements in the year reported on but others were gently required. The surgical operations at the dispensary are given in the report. It is noteworthy that for some time several natives attended the dispensary at their own request to acquire some knowledge of surgery.

Dr. Morrogh reports favourably on the Vellore dispensary and enumerates the surgical operations.

Mr. Blackwell remarks on the dispensary at Vizagapatam :—
 “There can be no doubt of the high estimation in which this institution is held by the inhabitants of the town and surrounding district, many come from great distances for medicine and advice, and I am often surprised to see mere children applying for medical aid, and returning again and again to take medicine, a fact I should have hardly expected, and certainly should not in an English dispensary. I never remark the slightest objection to follow any treatment suggested and am often struck with observing a determination to persevere with remedies for diseases which are plainly incurable, many considering European treatment infallible.”

The following tables shew the diseases most prevalent amongst Europeans and natives as treated at the dispensaries of the Madras Presidency in 1856:—

Return of European sick at the Civil Institutions.

Europeans.	Diseases.																	Average Daily number of sick for the year.
	Fever.	Eruptive fevers.	Diseases of the lungs.	Diseases of the liver.	Diseases of the stomach and bowels.	Diseases of the brain.	Epidemic cholera.	Dropsies.	Rheumatic affections.	General affections and diseases of the genital organs.	Abscesses and ulcers.	Wounds and injuries.	Punished.	Diseases of the eye.	Diseases of the skin.	Other diseases.	Total.	
Remained 31st December, 1855, ...	5	0	2	0	1	3	0	0	0	3	5	1	0	1	17	5	41	
Admitted since, ...	323	21	73	3	188	33	6	4	44	115	117	85	1	195	133	216	1557	
Discharged, ...	322	20	68	3	170	34	3	3	43	111	115	80	1	185	128	204	1490	77
Died, ...	4	1	3	0	14	1	3	1	0	2	3	2	0	0	3	11	48	
Remaining 31st December, 1856, ...	0	0	4	0	5	1	0	0	1	5	4	4	0	11	19	6	60	

Fort St. George. Medical Board Office, }
6th June, 1857.

(By order,)

A. LORIMER, M. D.,
Secretary, Medical Board.

Return of Native Sick.

Natives.	Diseases.																	Total.	Average daily number of sick for the year.
	Fever.	Eruptive Fevers.	Diseases of the Lungs.	Diseases of the liver.	Diseases of the stomach and bowels.	Diseases of the brain.	Epidemic cholera.	Dropsies.	Rheumatic affections.	Veneral affections and diseases of the genital organs.	Abscesses and ulcers.	Wounds and injuries.	Punished.	Diseases of the eye.	Diseases of the skin.	Other diseases.			
Remained 31st December, 1855, ...	4	2	2	0	4	3	0	2	4	22	13	12	...	1	36	22	127	129	
Admitted since, ...	80	30	60	4	193	165	32	41	69	252	161	144	...	4	90	339	1,664		
Discharged, ...	74	29	36	2	142	152	8	20	71	252	139	132	...	5	65	243	1,370		
Died, ...	9	3	22	2	48	13	24	20	1	4	10	17	...	0	11	104	288		
Remaining 31st December, 1853, ...	1	0	4	0	7	3	0	3	1	18	25	7	...	0	50	14	133		

Fort St. George, Medical Board Office, }
6th June, 1857.

(By order.) A. LORIMER, M. D.,
Secretary, Medical Board.

The statement contains other tables and an extract from the minutes of consultation.

MADRAS MEDICAL COLLEGE.

Madras Records, No. XLVIII.

THE report is for the Session of 1856-57. A Committee of medical officers had been appointed to examine the students and to report on their proficiency. The examination was carried on by the Professors, the Committee being present and occasionally putting questions. The examination was considered generally satisfactory excepting that of the senior class in Practical Medicine and Chemistry. The Committee in their report on the state of the College, "consider the course of study prescribed for the native medical pupils and medical apprentices unnecessarily high and unsuitable to their future position and prospects in the service. They observe that the pay which the subordinate grades of the medical service receive, and their prospects in the service, are not such as to satisfy and make contented men who acquire such an education and so large an amount of professional qualifications; that they are neither in position, pay, or general knowledge equal to a higher grade in the service, while in simply professional attainments they are above their position and pay." They therefore recommend that the examination for Assistant Apothecaries and Second Dressers should be conducted on a more limited scale. They also suggest that the Council should be remodelled and should in future consist of three lay or non-professional members with one of the Professors as Secretary and a President invested with authority and influence. With regard to any alteration in the government of the College, Mr. Arbuthnot, the Director of Public Instruction, thinks that the rules for the management of the Calcutta College should be introduced at Madras. "They secure to the President or Principal that authority which is essential to the efficient discharge of the duties which ought, but which on the present system do not, devolve on the President of the Madras Medical College Council, and at the same time they secure to the Professors the right of recording their views on every subject affecting the interests of the institution, or their respective branches of instruction."

Mr. Arbuthnot further annexes a draft of the rules he proposes for the substitution of those now in force.

The expense of the Madras Medical College for 1856-57 was

Rs. 42,442-10-8, of this sum Rs. 12,532,-4-1 was given as salaries to the principal Professors and Rs. 4,437-8 to their Assistants. The following is an abstract statement of the expenses :—

Abstract Statement of the Expenses.

					<i>Rs.</i>	<i>As.</i>	<i>P.</i>
Salaries of Professors and Secretary, ..	...	...	...	...	12,532	4	1
" " Assistants, ..	...	...	...	...	4,437	8	0
" " Servants, ..	...	...	...	...	1,910	1	10
Contingent expenses, ..	..	..	..	...	797	14	4
Annual supplies, &c., ..	..	..	..	...	800	3	5
<i>Salaries of Students.</i>							
Stipendiary students, ..	..	..	..	...	1,133	8	6
Military students, ..	..	..	..	...	20,831	2	6
Total Co.'s Rs. ..					42,442	10	8

The Professor of Anatomy observes that the course included sixty-eight lectures and nineteen examinations. He complains of the shortness of the Session, only seven months and a half exclusive of holidays, and suggests that in future it should continue from 1st August to 8th April.

The Professor of Physiology states that his lectures during the Session were in all sixty-five and the examinations were eighteen in number. The course was very incomplete and the Professor suggests that in future the Session should always last for eight full months and ten days.

The Professor of Chemistry mentions that during the Session there were 108 lectures and 16 examinations given to the class of inorganic Chemistry and 61 lectures and 7 examinations to the class of organic Chemistry. This Professor does not complain of the shortness of the Session but regrets the "lamentable want of accommodation for laboratory students."

The Professor of Botany delivered 71 lectures, held 12 examinations and took with his pupils two excursions during the Session. He reports the intelligence of the botanical class as good and their industry as satisfactory.

The Professor of Materia Medica delivered 91 lectures and held 9 examinations.

The Professor of Midwifery gave 76 lectures on Midwifery and diseases of women and children and 24 lectures on diseases of the eye.

The course of the Professor of Surgery consisted of 57 lectures and 29 examinations. The students are reported to have made fair progress and conducted themselves satisfactory.

The Professor of Clinical Surgery delivered only 27 lectures in consequence of the shortness of the Session.

Every student in the class of Military Surgery is reported by the Professor to have conducted himself in a most satisfactory manner. The course comprised 42 lectures and 11 examinations.

The Professor of Medicine delivered eighty-three lectures and the Professor of Clinical Medicine gave 25 lectures.

The Professor remarks:—"The conduct of the lads in hospital, with one or two exceptions, has been highly praiseworthy, and it is impossible not to feel an interest in students whose general demeanour has been marked by so much propriety, and who to intelligence have added regularity and zeal in the performance of their duties, with kindness towards the sick. The spirit of the students was strikingly shewn in the instance of a recent sudden and alarming outbreak of cholera in the wing of H. M. 43rd Regiment L. I. on its arrival at Madras, and when the hospital of that corps was crowded with the sick. Nothing could exceed the zeal and devotion of the students when their services were temporarily called for upon that occasion; a fact which, I conceive, reflects credit not only upon themselves, but upon the College where they were trained."

The course of Medical Jurisprudence consisted of 23 lectures and 9 examinations by Dr. Blacklock, and 16 lectures and 4 examinations by the Professor. The report here contains the result of the final examination, and list of cases treated and operations performed by the students.

In 1856-57, only one student passed for diploma.

The report here contains a list of donors to the library and the curriculum of study.

With regard to the report of the Committee of Examiners, already analysed, the College Council say, "its unusual tenor has awakened deep regret not unmingled with surprise." The Council object entirely to the proposed alterations which place the management of the College in the hands of an individual and consider the charge brought against the Professor of Chemistry, of not being able to communicate instruction in a satisfactory manner, as perfectly groundless. The Council forward to the Director of Public Instruction, a letter from Professor Mayer in vindication of his powers as a teacher.

On the 5th May, 1857, the whole subject of the examination was discussed in the *Athenæum*, which called forth the following remarks from Mr. Arbuthnot, Director of Public Instruction, addressed to the President and Members of the Medical College Council:—"It is hardly necessary for me to inform you that the unauthorized publication of official documents or of comments on such documents in the public newspapers by officers of Government is strictly forbidden, and that every officer in

the service of Government is bound not only to abstain from communication with the public press regarding papers which have come before him in his official capacity, but to take due precautions that such papers while in his official custody are not tampered with by others. I am constrained to infer that the communication in question must have emanated from the Medical College, and I consider it my duty to request that you will take such steps as may prevent the occurrence of a similar violation of the order of the Honorable Court of Directors on any future occasion."

In answer to these remarks the Members of the Council stated that they were not aware of the authorship of "the communication which appeared in the *Athenæum*."

THE EASTERN NARRA.

Bombay Records, No. XLV.—New Series.

CAPTAIN Baker, the Superintendent of the Canals in Sind reports that on the east bank of the Sutlej from Rooper to near Bhawalpoor there is a raised central channel with a depression on either side. Such a channel would be caused by the passage of a river over an alluvial plain. The depression extends in this instance in a course parallel to that of the Garra and Indus to Subzulcote, from the vicinity of which it has been traced to the head of the Eastern Narra about eleven miles east of Roree. It receives water from the river by direct overflow and its drainage is the source of the Narra's supply. The supply is however now very precarious, but it is reported by native writers that the supply of water was once constant until the head of the Narra on the banks of the Indus was obstructed by a bund, which Captain Baker has been unable to identify. The slope of the Narra channel is nearly parallel to that of the Indus and about 20 feet lower than its cold weather level. It is therefore practicable to fill the channel of the Narra with a stream of water from the Indus. There would however be reason for apprehension lest the channel of supply should be so much deepened and widened by the action of the torrent that more water might be drained from the Indus than could be spared, or perhaps the main stream of the river would be transferred to its ancient channels. This danger might be obviated by a masonry head, but the nature of the banks of the Indus is unfavourable to the construction of such a work. "The line of the proposed supply channel would pass between some of the detached rocks near Roree, and thence skirt the foot of the sand-hills which have collected against the

rocks as far as the opening through the latter at Alore; through this it would follow the line of the Alore Canal till clear of the hills and would then be carried by a more direct course into the Narra opposite Trigadee. The total length of this line is 16½ miles."

With regard to the benefit likely to accrue to the British possessions in Sind from the restoration of the Narra, Captain Baker thinks it would be confined to the Hyderabad Collectorate. As the territories of Ali Morad and the Rao of Cutch would be advantaged by the opening of the Narra, Captain Baker anticipated that those Chiefs might contribute to the opening of the river.

With reference to this report, Captain Rathborne, Collector of Hyderabad observes in 1850:—"It is quite clear that Captain Baker himself was misled, or, at any rate, that the bund he wrote regarding was a perfectly different one from that contemplated by myself, and the advisability of cutting through which I had reported so early as November, 1843: this latter bund he most erroneously supposed to have no existence. On this point, however, I was sure that he was wrong, for one of the very first things impressed upon me, after taking charge of this Collectorate, was the advisability of bringing to a conclusion the negotiations which had for some time been in progress regarding this bund's destruction; and it was impossible to suppose that, that could have been the subject of angry discussion between this and the neighbouring state, which, in point of fact, had no existence. I therefore again sent for the person, whom, from his having seen the bund, I had found able to give me the best information about it, and who had also held an important Revenue office under Meer Sobdar, the Meer to whose share of the division of Sind among the Ameers the chief part of the land on the Narra fell. He was ill at the time and for some months subsequently, but he has since been able to go to Subzulcote and has traced the Narra down to Lower Sind and made a sketch of its course." The sketch is contained in the report. It appears from this, that the Narra branches off from the Indus near the village of Ghosepoor, which is built on the site of an ancient city and lies on the territory of Bhawul Khan.

The bed of the Narra is said there to be in places a hundred and twenty miles* broad and bears the name of Toorkaree, it is called Narra at a spot much lower down named Jerrur Doree. At the spot where the bund is erected, not far from Jerrur Doree, the river is one coss broad and the bund is made of earth and brushwood rammed well together producing an almost impenetrable wall right across the whole bed of the Narra and of the average thickness of fifty yards. "This bund

* Sic.

is said to rise far above the banks on each side, and as these are, at that spot, of an earth particularly tenacious and almost as hard as stone, the result is obviated, which, at almost any other part, might be anticipated from such a work, viz. the cutting away by the stream of the banks round each end of the bund, until a new channel was cleared equal in size to that which had been blocked up. This bund was made by Futteh Mahomed Ghoree, a man whose name will be familiar to every one who has read the papers connected with our early negotiations and subsequent taking of Sind. His object was to give an additional supply of water to his Jaghire of Birha, situated on the western bank of it. The bund was erected in Khurreef, 1249, corresponding to the year of our Lord 1838, and its pernicious effects were immediately felt in Lower Sind. The water in the lower part of the Narra, which had afforded a supply often great, always considerable, was cut off; no less than three hundred and sixty Colabs, or lakes, fed by it in Lower Sind were dried up; fisheries which had brought, in good years, some thousands of rupces of revenue to the Ameers were destroyed, and lands which had yielded as the Government share some hundreds of Kurwars became waste. But the mischief did not end here: more important matters than revenue were concerned. There was a considerable Belooch and Jhutt and Hindoo population along the Narra, and the important towns of Kippra, Loondra, Mitta Khan, Chotcearce, Sirenwarce, Mittrow, Syed Gholam Nubbee-ka-gote, and Oomerkote lie along its banks; and as the natural fertility of the soil along the whole valley is unrivalled, it may be imagined what distress the cutting off this, the main supply of water, must have occasioned. Numbers were in point of fact deprived of their means of subsistence, and many who had gained a sufficient support from the fish and wild fowl on the Narra, and from the grain and vegetables grown along its banks, were reduced to the alternative of leaving the country or taking to those illegal methods to obtain a livelihood which the neighbourhood of every desert holds out alike such great temptations to and such great facilities for. Meer Sobdar, whose lands were chiefly affected, immediately despatched a Vukeel, named Ghoolam Hoosein Juttohee, to Khyrpoor, who was instructed to remonstrate with Meer Roostum and obtain an order from him for the instant destruction of the bund. This he succeeded in getting from the Meer, but Meer Nusseer Khan of Khyrpoor afterwards induced Meer Roostum to suspend the operation of it, and Meer Sobdar's Vukeel himself, having been handsomely treated by the Khyrpoor Durbar, neglected to press the matter very strongly, and so the

bund remained. Meer Sobdar on this decided on turning Ghoolām Hoosein out of his service, and renewed the negotiation through other channels; while, in order to give weight to his remonstrances, he ordered the several Kurriahs running through his dominions to the Jaghires of Meer Roostum in this Collectorate (Kobecra, Kotara, &c.) to be bunded up, and all supply of water to them to be thus cut off: the grain growing there he also had impounded, and these active measures appear to have been calculated to produce the required effect. But at this juncture war between the British and the Khyrpoor State broke out; other more important matters had to be attended to; the conquest of Sind was effected; and the bund remained." If the bund were destroyed Captain Rathborne estimates that the revenue of the Hyderabad Collectorate would be increased five lakhs. Moreover "it would remove a standing violation of all natural justice, for what can be more inequitable than that the supply of water which God sends the people should be thus cut off? it would do much towards restoring to prosperity the now almost ruined towns and villages along the Narra's banks; and the lakes refilled would afford a comfortable means of subsistence to thousands, where nothing now but the Peloo and Tamarisk grow. These are advantages which, in the eyes of a civilized Government, will always outweigh those of mere money, however necessary to be looked to, as the world is constituted, these may be."

On the foregoing report, Mr. Pringle, Commissioner in Sind remarks that it is scarcely probable that Captain Baker should have been mistaken. Lieutenant Colonel Scott thinks that "the question cannot be settled without some person be sent to inspect the place." In accordance with this suggestion, Mr. Inverarity, Acting Collector, Upper Sind went to inspect the site of the supposed bund. His report was generally unfavourable to the views of Captain Rathborne and Mr. Frere thus sums up the whole correspondence:—"1st. That Captain Baker, with whose high merits as an Engineer officer your Lordship is well acquainted, considered it probable that the obstruction of the Narra was not any single artificial work. 2nd. That he did not ascertain conclusively, and in a manner to remove all doubt on the subject, whether or not he was correct in this supposition. 3rd. He sketched out a plan for opening, at no great cost, a new mouth, which would give the required supply, under the restrictions necessary, for the security of other important objects. 4th. That Captain Baker's project lay over during the troubled times which succeeded 1844, the year in which it was sent in. 5th. That Captain Rathborne, Collector of Hyderabad,

has since obtained, what he considers strong evidence, to show that the obstruction is an artificial work of recent erection, the removal of which would at once restore the ancient supply. 6th. That Mr. Inverarity has visited the spot indicated by Captain Rathborne, and sees reason to agree rather with Captain Baker, that the artificial obstruction there existing is not the sole, even if it be the principal cause, of the deficiency of supply, and that this view is confirmed by the opinion of Colonel Scott. Finally. That while all are agreed as to the great benefits which would follow the restoration to the Eastern Narra of an abundant supply of water, it is still doubtful whether the obstruction to such a supply is an artificial bund, or a change in the course of the main Indus, and, if the latter, what would be the cost of the measures proposed by Captain Baker for providing a supply."

Mr. Frere himself thought that the benefits promised by a restoration of a full supply of water to the Narra were such as to justify the employment of an officer on this special duty. Accordingly after some correspondence and an intimation from the Bombay Government "that no trivial obstacle should be allowed to interfere with the survey." Lieutenant Fife was deputed. Lieutenant Fife reported:—"The Narra is fed by two floods, one of which comes from near Subzulcote, the other from the low ground between Alleewan and Kashimpoor, a few miles above Roree. The two floods meet above the bunds at Birha, Syed Ali Acbar, and Fukeerabad, and then flow across the country into the Narra, filling the artificial bunds on their way. Now it is perfectly plain that had these bunds really the effect ascribed, the floods being prevented from escaping south by the Arore range of hills, would *return to the Indus above Roree*. But this is not the case, they flow over the country between and beyond the bunds into the Narra. From the Arore hills to the village of Fukeerabad, a distance of eight miles, the country is flooded, the whole of the water flowing steadily to the south-east. Thus, then, the question about these bunds is set at rest."

In December, 1851 Lieutenant Fife was directed to make a survey of the Narra southwards to see if the project recommended by Colonel Baker for refilling the Narra or any modified scheme were practicable.

On the 16th September, 1852 Lieutenant Fife transmitted his final report on the eastern Narra. In this report three projects are transmitted to Government for the supply of the Narra with water:—"The line for the first project leaves the Indus below the town of Roree; thence it runs close past the village of Ubbeejano, and through the opening in

the hills at Arore, and from that place goes direct to the nearest point of the Narra below the village of Kharce. The line for the second project leaves the Indus immediately above Roree, and then skirts the range of hills as far as Arore; from Arore it runs direct to the nearest point of the Narra, corresponding in this respect with the first project. The third project coincides with the second as far as the village of Kumbra, but from that point it takes a more southerly direction, and joins the Narra below Lchra, following in the three last miles of its course the direction of one of the natural feeding channels of the Narra.

"The line for the first project very nearly corresponds with a line of levels taken by Major Baker to demonstrate the feasibility of supplying the Narra from the Indus. It differs from it only in being rather shorter, going inside instead of outside the village of Ubbeejano, and running into the Narra at its nearest bend somewhat below the point where Major Baker entered it, instead of opposite the village of Trigadee.

"The head of this channel passes between two detached rocks below Roree. At 620 yards from its head it is cut through the rock. Embankments of stone connect the detached rocks with the bank of the river. These would be constructed with the material removed in cutting the rock further on. They are necessary to prevent the water entering the head of the supply channel from two or three different points, in which case, there would be a likelihood of their all failing on the subsiding of the river. There is no clay between the rocks; there is nothing but loose sand, which is swept away during the height of the inundation, a fresh accumulation taking place as the river subsides. A great deal of the remainder of the material removed in the rock-cutting would be used in facing the earthen slopes, above and below where the channel passes through the rocks, to preserve them, as the channel makes rather an abrupt turn, and the stream would otherwise act injuriously on the banks.

"The bottom of the channel is carried on a uniform slope from the cold weather level of the Indus, to within five feet of the bottom of the Narra, the fall being at the rate of about one foot per mile. This fall is sufficient to secure a good stream, and five feet would probably be the extent to which the bed of the Narra would rise were an artificial supply regularly thrown into it. If the bed of the Narra were to assume a uniform slope at the rate of about nine inches per mile, or the same slope as the Indus, upwards from Janoojee, the depth were the supply channel enters it would be reduced from twenty to twelve feet. This would make it three feet above the bottom of the supply channel; as, however, the occasional heavy floods to which the Narra is liable would tend to keep down the accumu-

lation of silt, the probable reduction in the depth of the channel has been taken at five feet, or up to the bottom of the supply channel. In this project the supply channel has a width at bottom of 183 feet, the depth of the water being eleven feet; when the Indus is at that height.

"The peculiar recommendation of this project is, that in case of a large supply of water being required during the cold weather, the head of the channel which lays between the rocks forming the banks of the Indus is not liable to be masked by an extensive accumulation of silt and the supply thus rendered uncertain.

"The objections to it, however, are great; the circuitous course greatly increases the expense, both from making the channel longer, and, by reason of the fall being disseminated over a greater base, larger in section than would be required in a more direct route. But there is a greater objection than the increase of cost. From the addition of nearly four miles to the length, there is a serious waste of fall. If a body of water sufficient to be of any practical use were thrown into the Narra during the cold season, there would be but little difference of level between the two rivers; the fall would be insufficient. It would be almost impossible to keep the channel open, or to get anything like an ample supply through it. Another disadvantage in the project is, that the channel would not enter the Narra at an advantageous point, the capacity being less near Kharee than it is lower down. The channel would, moreover, cross the country from Arore to the Narra in a direction oblique to the course of the floods, which, as indicated by the various feeding channels, run in a more southerly direction than the line of the channel. This is a serious objection; a strong stream would be created outside the embankment of the supply channel from Kotree to the Narra, a distance of about four miles. This would result either in the formation of a large channel, or in the embankment being cut away and the flood water forcing its way into the supply channel, which might then be enlarged to a serious extent, and by an agency over which we should have no control. Both the last objections might be alleviated by taking the supply channel into the river below Lehra, but this would increase the already large estimate to about Rs. 6,40,000.

"In the second project the supply channel leaves the Indus immediately above Roree and at a point where the channel of the river is subject to but very little variation. At 1,130 yards from its head it is cut through rock at the end of a spur, and between this point and Arore it passes through three other spurs at distances of about a mile apart. At each of the points where it passes through rock the material removed would be used for

facing the slopes of the channel both above and below the rock-cutting, to prevent the stream, which might be thrown out of its true direction on suddenly meeting the rock, acting injuriously on the earthen slopes. The bottom of the channel, like that in the first project, is carried on a uniform slope from the cold weather level of the Indus to within five feet of the bottom of the Narra; the fall obtained being about one foot four inches per mile. This will ensure a good stream, at the same time that any tendency the supply channel may have to enlarge would be most effectually controlled by the rock-cuttings at regular intervals. The channel is 155 feet wide at bottom, the depth of the water being eleven feet. In respect to the slope of the bed in this project, it is rather less than that of the Ganges Canal at its head. The channel is, however, somewhat larger than the Ganges Canal, and the discharge is about one-sixth greater. The channel in this project is only eleven miles in length. The estimate amounts to Rs. 4,49,875.

"The advantages of this project are, that from the route being direct a great reduction in the cost of affording the supply is effected, and that, while there is no waste of fall, there is perfect security, by means of the rock-cuttings, against any undue enlargement of the supply channel.

"The objections to the project are, that an accumulation of silt might take place in front of the head of the channel, rendering the cold weather supply, should it ever be required, at times uncertain, and that, like the first project, the channel, as it approaches the Narra, crosses the direction of the floods obliquely. The first objection is not so serious as it at first sight appears. It is impossible to prevent the mouth of a channel, filled from the Indus, silting up to a certain extent as the river subsides after the inundation. Under any circumstances, therefore, it would be necessary, in order to ensure a good supply during the cold season, to close for a time and clear out the channel at its head, and, while that clearance was being effected, a passage through the accumulation of silt in front of the head, should any have taken place, might also be cleared. The channel least liable to have its supply cut off by a deposit of silt inside it, is that which provides the most ready escape for the water from the river, and this evidently depends on the slope of the bed, in which respect this project possesses an advantage over the former one.

"The third project differs from the second only in the direction of the channel between Kumbra and the Narra. The channel is of the same dimensions, has exactly the same fall per mile, and has the same security against undue enlargement. But it has the additional recommendation of running parallel

to the direction of the floods instead of obliquely across, and of entering the Narra nearly three miles further south, where the capacity is greater. Whether considered in respect to the present purpose of affording an ample supply during the inundation, or in respect to any future plan for increasing that supply, or of making it perennial, this project possesses great advantages over the two preceding ones. And those advantages are obtained at no great expense; for though, from entering the Narra further south, the length of the line is increased, the cutting below Kotree is lighter than in the other projects, while from following in the three last miles the course of a channel already in existence, a still further saving is effected. The length of the line is thirteen miles. The estimate amounts to Rs. 4,77,805.

"The only works which would be necessary, besides those connected with the supply channel, are some earthen bunds across the dund-feeding channels in the Hyderabad districts, to prevent the water running into them when not required. Some of the largest dunds would not require re-filling oftener than once in three or four years, and even then some of these would not require to be completely filled, for at a high level their shores are steep, consequently during the first season after being filled but little land would, on the sinking of the water, be left exposed for cultivation. It would therefore merely waste the water filling them to a high level. Many of the smaller dunds would require a fresh supply of water every season. These bunds will not entail any great expenditure; their number and position, and the arrangements for filling the dunds, will be decided during the approaching season, and when it has been seen in actual practice what arrangement would give the greatest revenue with the least expenditure of water. The detail accounts of the revenue obtained from the dunds during the past season will contain a great deal of the information required."

The Superintending Engineer of Sind, Major Turner recommends the Government to adopt the third project as detailed by Lieutenant Rife in which he proves :—"1st. That at an expense of Rs. 4,77,805 a quantity of water may be annually, and with certainty, thrown into the Eastern Narra, as great as that which now reaches it only in the extraordinary inundations which take place at intervals of twenty-five years or longer. 2nd. That there is no reason to fear that the obstruction of this quantity of water will in any way affect the supply of water in the Indus lower down. 3rd. That the plan proposed will, in no way, risk a diversion of the main stream into any new channel. 4th. That there exist, within the Hyderabad Collectorate, rich lands capable of being watered from the Eastern Narra to an extent more than commensurate with any possible supply of water

5th. That there is within reach a sufficient population, able and willing to take advantage of these facilities for cultivation, without permanently withdrawing cultivators from the banks of the Indus. 6th. That a permanent supply of water would probably ensure a permanent population on the Narra, such as evidently, at a remote period, found a living there, but such as has not existed there for several centuries past. 7th. That the return, from simply admitting the water into the old channel, allowing it to flow over the low lands and fill hollows, to be cultivated as they dry up, may, at the lowest, be reckoned at Rs. 52,500 per annum, which is capable of being greatly increased."

The reports and correspondence were in 1852 submitted to the Governor General in Council who sanctioned the proposed outlay of Rs. 50,000 pending a reference to the Honorable Court of Directors. Accordingly the works were begun, and in October, 1853, an additional expenditure was sanctioned.

A report was then made to Government on the best means of economising the water supplied by the Narra. The report was based on a survey undertaken by Lieutenant Fife, and the means proposed required an outlay of Rs. 26,204.

Mr. Frere, when at Roree visited the works there being carried on under Lieutenant Fife and reported :—"The channel is 16 feet deep and nearly 206 feet wide at top, the sides standing at a slope of 1 in $1\frac{1}{2}$. There is a berm, or towing path, 15 feet wide, on each side; instead of the excavated soil being piled in irregular and unsightly heaps, as is the mischievous practice on every other canal in Sind, so that the sides continually fall in and a large portion of the best ground is wasted, the excavated earth is distributed in two uniform platforms, or terraces, on either bank, generally about 8 feet above the natural soil. These form efficient barriers against the highest inundation, which occasionally lays the whole country above Roree under water, bursting the banks of the canals which run through low ground and washing vast quantities of silt into them. These terraces will also, in consequence of their security from submersion, and the vicinity of water, form admirable garden ground, for which there is a great demand near Roree; and the revenue from them will form a considerable addition to the returns originally calculated on. The method of carrying on the excavation is also new to the country, and a decided improvement on that heretofore in use in such wide and deep excavations. The usual mode of excavation in Upper Sind is either by 'Cherh' or Statute labour, or by contract. Under the former system every cultivator interested, or supposed to be interested in the work, is obliged to contribute a quota of labourers in proportion to the extent of

his cultivation, and all hands work till the task is finished, receiving, if the Government be liberal, a ration of grain sufficient to feed the workman, but not sufficient to induce him to delay the completion of his task. Contract work is taken by guessing or roughly measuring the task. In either case there are innumerable devices to make the work done seem more than it really is, and to palm off as finished an incomplete task. In both modes of working the excavated soil is sometimes moved in baskets or by a machine called a 'Keen,' a board drawn by oxen, which, like a gigantic hoe trailed over the ground, scrapes up the loose earth before it, and moves it after the oxen, as far as may be required, when it is lifted, so as to leave the earth behind it, and returns for a fresh load. But more commonly the only implement used is the 'poura,' a hoe with a blade as large as a good size shovel and a short handle. The labourer fills the blade by striking it into the soft soil, and then, by a jerk, throws the shovelful upwards and behind him to the distance of several feet. If the soil is to be moved far, one man stands behind the other, and each pitches the earth from his poura so as to fall at the feet of the man in his rear, who, in like manner, passes it on to the next man behind him; in this way a string of fifty men may sometimes be seen moving earth, from the bottom of a deep and wide canal, up the sides and over the high spoil-banks, which rise above the edges of the canal. So expert are the Upper Sind labourers at the use of the poura, that where the distances to which earth is moved are short, the method above described is an economical way of applying their labour; but for distances such as are required in the Narra excavation, such a mode of working becomes very wasteful. The method adopted by Lieutenant Fife is as follows:—The channel is divided into portions or lots of 100 feet in length; at the extremity of each lot a ramp or slope 10 feet wide is left for ascent and descent; the earth between the ramps is then removed in regular layers or 'floors' $1\frac{1}{2}$ foot thick, till the requisite depth is attained, when the sides of the channel are cut to a slope of 1 in $1\frac{1}{2}$ and the ramps are removed. By this method sufficient room is allowed between the ramps to measure out the work, while the ramps occurring at convenient intervals, and being kept at an easy slope, the soil is got out of the excavation with great facility. The men are divided into gangs of ten each, and the work is marked out in daily tasks for each gang, and then, if necessary, subdivided into individual tasks. The quantity in each task, of course, varies according to the depth of the excavation and the distance to which the earth has to be carried. The men work when and how they

please, no restriction being placed on them, provided the task be done by a fixed hour in the evening. The work accomplished is then so measured, by means of ropes and gauges, that any fraud in the excavation is all but impossible, and a tin ticket, marked to denote the overseer or measuring Moonshee who issues it, is given to every man who has completed his task. If the task be incomplete no ticket is given, nor can another day's work be assigned to the defaulter till his unfinished task is completed. The tickets are cashed for wages on presentation to the Shroffs, and in this way the troublesome muster rolls of many hundreds of workmen who are constantly changing are dispensed with. The most remarkable feature in the system is, however, the introduction of wheeled carriage for the removal of the excavated soil. The small two-bullock cart made entirely of wood, peculiar to Upper Sind, is used to remove the layers near the surface, and from its lightness, lowness, and extreme simplicity of make, is found to answer better than our larger, more expensive, and more cumbersome carts. As the excavation deepens the carts cease to work to advantage, and wheel barrows are employed. They are made and repaired on the spot by Native workmen, principally Marwarrees, and cost about Rs. 4½ each. At first it was difficult to persuade the men to use them, but when they had once learnt their utility, they positively refused to work without them, even after the daily task assigned to a barrow man had been increased by one-sixth above that of a man working in any other way. Though their tasks vary from 65 to 85 cubic feet per man, and the average is 75 cubic feet, still a man can earn 2½ annas per diem, good wages where the finest wheat flour is considered dear at a rupee per 80 lbs. Many get meat, of which all Sindees are very fond, and a cast cart bullock is generally converted into beef, and devoured by the workmen. It is difficult to get the labourers to remain long steadily at work canal-digging, which lasts from December to April. Ploughing, seed time, and harvest of both the autumn and winter crops, carry off hundreds at a time, who return when the work which took them away is over; and even without such inducement, when a man has earned a few rupees, he goes away and idles till it is spent. Singularly enough, the greatest numbers attend, and most work is done in the hottest weather. There is then but little fieldwork going on, and farmwork is scarce. But the fiery hot wind, coming over the white limestone range of the Alore hills, renders it almost death to an European to be long exposed to the sun. Even the Sindees cannot stand it; so they sleep all day, and work in the excavation at night and during the long twilight; and, by the excel-

lent arrangement of his task-work, Lieutenant Fife is able to superintend them, and get even more work than at the best working season."

In 1854, the consent of the Court of Directors was obtained for the work at an estimate of Rs. 4,77,805. This estimate has since been modified by Lieutenant Fife, so that the cost will be Rs. 1,399 less than that calculated. The Superintending Engineer of Sind has expressed his entire approval of the modification. The report contains maps and plans.

BRITISH RULE IN HOOSHEARPORE.

Selections from the Correspondence of the Punjab Administration, Vol. III., No. IV.

THIS record is by Mr. S. A. Abbott, Deputy Commissioner, and embraces the History of Hooshearpore, from its annexation in 1816-17 to the close of 1853-54.

The Jullunder Doab was declared British consequent on the Sikh invasion, the war resulting therefrom, and the treaty of the 9th March, 1816. It was the richest portion of the Sikh territory, and known by the name of Bisht Jullunder. Bisht being derived from the first letters of the Beas and Sutlej, and Jullunder, supposed to be the name of a demon, who falling from heaven covered the Doab. In reality the word Jullunder is probably derived from jal, water.

Hooshearpore forms the base of the triangle resting on the hills from Hajepore to Roopur, the remaining portion of the triangle, formed by the Beas and the Sutlej, being occupied by the Jullundur district.

The town of Hooshearpore which contains 10,369 inhabitants, Mussulmans and Hindoos being about equally represented, is only remarkable for its cloths. Its trade is not very great and consists in grain, sugar, tobacco, and cloths. The people are litigious, dirty and untruthful. The report here contains a table of meteorological observations and a price current.

The products of the district are wheat, barley, sugar, tobacco and Indian corn. The imports are valued at Rs. 1,97,775 and the exports at Rs. 1,20,000. The trade might be much increased were a route opened to Kurrachee. Cotton and woollen cloths, ironmongery, manufactured articles of tin and brass, glass and crockeryware would find a ready sale and be transmitted to the hills of Kangra and Jummo where they could be exchanged for borax and bees wax.

The settlement operations were commenced in the Doab by Mr. Christian, and continued by Messrs. Scott, Barnes, Temple and Melvill. The result was an immediate decrease in the collections of 5.24 per cent. Since the annexation, the demand has increased from Rs. 7,37,291 in 1846-47 to Rs. 12,17,152 in 1853-54. The revenue has been realised without difficulty and annoyance to the people, without a balance worthy of notice, or a sale of an estate, or duress of a Zemindar during the whole seven and a half years under review. The cost of the fiscal administration has been what the Zemindars pay their village accountants. The report contains the rent roll for 1854-55, statement of collections and cost of establishments for seven years.

The treasury business is represented as not very heavy, but the establishment perform the duties of the Judge's, Magistrate's, and Collector's offices, and are heavily taxed by the numerous returns required from the Deputy Commissioner. A memorandum of treasury business is appended to the report.

The table of the general statistical returns of the district of Hoosheerpore represents the population to number 7,50,566 persons, of whom only 1,11,958 are females. The district of Saharunpore is the only one of the North-west provinces that exhibits this paucity of females. The number of persons to each square mile is 333. The number of mouzahs is 2,202, and the area of the district is 2,203 square miles. Education is represented as being at a very low standard. In 1851, besides the Government school which educated forty-five boys there were "sixty-four Persian schools of 563 boys, and eighteen Hindoo schools of 470 boys; making a total of eighty-three schools and 1,078 boys. Many of the above could hardly be designated schools."

Recently ten new schools have been established by the Zemindars and according to the last returns these educated 455 scholars. It was computed that each scholar cost about six annas a month.

With regard to the judicial administration, Mr. Abbott remarks:—"In no country in the world is justice more easily obtained at a cheaper rate, or with less tedious delay, and especially in the Punjab. Yet there is still room for improvement. Law and technicalities are studiously avoided; common sense and equity, at a moderate cost of cash and time, are aimed at."

As has been before remarked the population are excessively litigious as will be seen from the annexed memorandum:—

<i>Year.</i>	<i>Cases in-stituted.</i>	<i>Cases dis-posed of.</i>	<i>Value.</i>		
1846,	0	0	0	0	0
1847,	1,515	1,394	1,64,212	5	6
1848,	1,376	1,368	1,55,593	5	2
1849,	1,397	1,540	1,37,148	0	4
1850,	2,211	2,285	2,19,136	3	6
1851,	1,786	1,841	1,80,965	10	9
1852,	2,705	2,640	1,67,335	10	3
1853,	3,421	3,588	2,09,787	2	3
<hr/>					
Total,	14,411	14,656	12,34,178	5	9

The cost of litigation is not very great, in 1852 the average cost per case was Rupees 6-3-2 and in 1853 it was Rupees 4-2-7. In 1849 the average duration of cases was two months and twenty-four days, in 1853 it was twenty-eight days. "The popularity, expedition, and cheapness of Civil Justice are attributable in a great measure to the investment of the Tehsildars with powers to decide cases, which they had, during the year 1853, for the first time, up to Rupees fifty; and it is beyond doubt that their decisions give greater satisfaction than those of the European officers. Fewer appeals lie from them, and a larger proportion are upheld in appeal." There has been a vast increase of appeals instituted in the Deputy Commissioner's Court, in the years 1848-49 the appeals were only two, whereas in 1853 they amounted to six per cent. In 1852 the cost of issuing processses was made equal, formerly it was regulated by the distance. A uniform rate of 12 annas for the Sudder Courts and six annas for the Tehsil Courts was adopted. A fruitful source of litigation is early betrothal, breaches of promise are very frequent.

The report contains a tabular statement of the cases instituted and pending in 1852-53.

On the Criminal Justice of Hoosheearpoor, Mr. Abbott reports:—"Considering the means at disposal, the result of the Police Administration would appear to have been tolerably good. There are few very heinous crimes, considering the vast population and the absence of moral education."

On an average there are seven cases of murder a year, since the British rule there have been only three dacoities, cattle lifting is not very extensive, in 1849 there were 114 cases, in 1850, 109 cases, and in 1852, '53, '54 there were only 50, 56 and 50 cases respectively. Burglary has been rather more common, the proportion of acquitted to summoned was in 1853, thirty-four per cent. In theft the proportion was 32 per cent. and in cattle stealing 45 per cent.

Abduction is very common and the seducer and seduced are according to the rules in the Punjab criminally punishable by fine and imprisonment. The amount of property stolen in the seven years reported on was Rs. 1,80,239 and that recovered Rs. 56,004 or 31 per cent. Child-stealing is not uncommon and female infanticide is prevalent. On the whole the proportion of "murders to population was one to every 1,02,218 persons; of burglaries, one to every 893; of miscellaneous offences, one to every 636, and casualties by accident, suicide, &c. one to every 3,745 persons." The report gives the salaries of the Police and Judicial establishments and a statement of the chowkedaree tax.

"The Jail is a fine open Court, 512 feet by 312, enclosed by a mud wall, twelve feet high, within which are the different wards: twelve of which are calculated to contain thirty-two prisoners each at 360 cubic feet of space. Solitary cells give 960 cubic feet; the hospital 600, and female wards 400 cubic feet." Sickness has been very prevalent in the gaol and the number of deaths to the daily average number of prisoners was on an average of seven years 7.9 per cent. The cost of the convicts is at an average Rs. 38-6-11 per man per annum of which the diet is Re. 1-3 a month. The cost does not include military guards. The system of working prisoners on the roads has been abandoned and industrial labour inside the gaols substituted. The direct profits in the work of the convicts has been inconsiderable, but the saving of guards is great. There is a plan both of Jail, and Treasury Cutcherry in the report, and also plans of thaunnaks and serais erected in the Hooshecarpore district.

In the town of Hooshecarpore a church has been erected, Saint Mark's, at a cost of Rupees 7219-1-2 of which Rs. 5238-2, was realised by subscription. In 1854 a dispensary was erected and the plan and estimate for a school had been sanctioned.

Since the annexation of the district Rupees 73,302-12-6 have been laid out on public buildings.

On the subject of roads Mr. Abbott remarks:—"The Government in India is frequently reproached by those not cognizant of the subject for taking from the agriculturists a tax of one per cent. on their revenue to form a fund for the construction of roads, and secondly, for allowing it to accumulate, and not spending it to the advantage of the people who furnish the funds. Nothing more forcibly refutes such reproaches, perhaps than the comparison of the past and present condition of a territory recently reclaimed from native rule. During the Seikh rule the Government never interested itself in the welfare or comfort of the people. No public spirit existed amongst the people to supply the deficiency. The consequence was, that

roads were unknown, trifling nullahs obstructed the tracks made by hackeries, winding a corkscrew like way round the edges of cultivation : the Ferries of their rivers were frequently unapproachable." All this has been altered. The roads that have been opened and repaired since the British rule have amounted to 498 miles and the total cost of their construction has been Rupees 1,47,844-9-9.

The dispensary has been tolerably successful, in 1853 the average daily attendance of out-door patients was 37 and the daily number of in-door patients treated 10. The cost in 1853 was Rupees 838-11-6, of which Government paid Rupees 684.

The recent results of vaccine operation are reported to be successful. From 24th November, 1853, to 31st March, 1854, there were 6,593 vaccinated.

The report concludes with a description of the fort of Brijwara and a list of plans and sketches.

MADRAS COURT OF SMALL CAUSES.

THE report is for the year 1857 and was submitted to the Government by the 1st Judge in February, 1858. No remarks are appended to the returns.

The Court sat two hundred and seventy-nine days, during which time 17,674 cases were instituted. Of these 3,251 cases were instituted by Europeans and 14,423 cases by natives. The amount litigated in the suits instituted was Rs. 2,73,235-15-8 and the fees received out of which portions were returned to suitors who compromised their cases before hearing amounted to Rs. 42,701-0-3. The net amount of fees carried to credit of the Government was Rs. 36,894-10-6; and the amount repaid to suitors was Rs. 7,722-7.

The following is a comparative table of the cases heard and decided in 1856 and in 1857 : —

	1856.	1857.
Judgment for Plaintiffs,	10,582	7,855
„ for Defendants,	912	771
Nonsuited and struck off,	1,281	865
Compromised,	9,164	6,996
Undecided,	46	59
Total,	21,985	16,546

The total expense of the establishment including the salaries of the three Judges was per mensem Rs. 6,274-8 or for the year Rs. 75,294, a sum nearly double the amount of the receipts.

The unrecovered costs during the year amounted to Rs. 191-2.

Statement shewing the number of Suits instituted in the Madras Court of Small Causes and the amount of Fees realized thereon during the years 1851, 1852, 1853, 1854, 1855, 1856, 1857, together with the progressive increase and decrease in each year.

Year.	Number of causes instituted.	Increase of causes in each year.	Decrease of causes in each year.	Fees realized.		Increase of Fees in each year.		Decrease of Fees in each year.	
				Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
1851,	23,668	...	...	37,417	7 0	...	...	...	...
1852,	24,392	724	...	43,349	2 3	5,931	11 3	...	...
1853,	25,192	800	...	46,479	10 0	3,130	7 9	...	...
1854,	26,483	1,291	...	49,281	10 0	2,802	0 0	...	...
1855,	26,199	...	284	51,754	12 0	2,473	2 0	...	...
1856,	22,869	...	3,330	43,682	14 6	...	...	8,071	13 6
1857,	17,674	...	5,195	36,909	10 6	...	...	6,773	4 0

Madras Court of Small Causes
The 30th day of January, 1858

G. E. COWER,
Clerk.

THE SUPREME COURT OF MADRAS.

(SMALL CAUSE SIDE.)

THE report for 1857 was submitted to Government by the Prothonotary in January, 1858. The causes instituted were 322 in number, of these in 132 cases judgment was given for the plaintiffs, in 23 cases there was judgment for the defendants, 25 plaintiffs were nonsuited, 126 cases were compromised, 11 were struck out and 5 were undecided at the end of the year. Of the five undecided, two had been pending since May. The pauper cases instituted were ten, in four of these cases judgment was given for the plaintiffs.

The receipts during the year amounted to Rs. 10,215-13, and the expenses to Rs. 11,258-5-5, exclusive of Rs. 1,000 paid into the Government treasury.

THE MUTINIES.

Parliamentary Papers.

Two large Blue Books on the Mutinies, Appendices A and B to Report No. 5, contain only enclosures detailing facts previously condensed from the narratives. They consist chiefly of official reports, telegrams and orders on affairs in Patna, Julpigoree and Calcutta.

THE SALT DEPARTMENT

For 1856-57.

ON 9th January, 1858, Mr. E. T. Trevor, Secretary to the Board of Revenue, reports on the operations of the year. The quantity of salt in store on 1st October, 1856 was:—

IN STORE ON	1st October, 1855.			1st October, 1856.		
	<i>Mds.</i>	<i>S.</i>	<i>C.</i>	<i>Mds.</i>	<i>S.</i>	<i>C.</i>
In the Wholesale Government Depots of Bengal and Kyouk Phyoo, {	16,68,996	32	11	26,51,175	1	4
In the Government Retail Golahs of Bengal, {	37,714	9	9	47,437	12	9
Imported private Salt in bond in Golahs at Sulkea, {	3,42,574	35	4	93,276	0	0
Excise Salt (estimated,)	10,574	2	11	1,263	14	8
	20,59,864	0	3	27,93,151	28	5

The quantity of Government salt brought into store, and of private salt was :—

	1855-56.			1856-57-		
	<i>Mds.</i>	<i>S.</i>	<i>C.</i>	<i>Mds.</i>	<i>S.</i>	<i>C.</i>
In the Wholesale Depots of Bengal } and Kyouk Phyou, }	36,26,099	32	0	35,03,323	28	0
Private Salt imported by Sea, }	34,89,771	0	0	37,99,917	0	0
Ditto made under Excise License } estimated, }	38,847	15	8	26,021	5	12
	71,54,718	7	8	73,29,261	33	12

The sales were :—

SOLD.	1855-56.			1856-57.		
	<i>Mds.</i>	<i>S.</i>	<i>C.</i>	<i>Mds.</i>	<i>S.</i>	<i>C.</i>
By Wholesale under Rowannahs,	24,93,428	0	0	31,46,694	5	0
By Retail at reduced prices,	3,05,887	21	4½	3,07,305	38	6
Imported Salt paying duty,	38,34,730	33	9½	34,54,320	24	15
Excise Salt ditto,	53,033	0	0	31,763	0	0
	66,87,079	17	13¾	69,40,083	28	5

The following are the outturns of the agencies :—

	TAIDAD.	OUT-TURN.	EXCESS.	DEFICIENCY.
	<i>Mds.</i>	<i>Mds.</i>	<i>Mds.</i>	<i>Mds.</i>
Hidgellee,	11 lacs	10,75,951	.....	24,040
Tumlook,	9 ditto	7,41,501½	.....	1,58,498½
Chittagong,	8 ditto	4,39,369	.....	3,60,631
24 Pergunnahs,	5¾ ditto	2,55,503	.....	3,19,497
Balasore,	7 ditto	6,35,058	.....	64,942
Cuttack,	4½ ditto	2,98,655	.....	1,51,345
Pooree,	7 ditto	12,63,518	5,63,518	.....
	52½ lacs	47,09,555½	5,63,518	10,78,902½

Net Deficiency, 5,15,444½

“The only manufacture under the new Excise rules was on Sangor Island, where 102 khalaries were worked, and 29,763 maunds of Salt made by Mr. Fraser. The Salt sold during the

past year, for consumption within the limits of the chowkeys under the Controller, shows a net increase of maunds 21,241 over that sold in the preceding year." In Chittagong only has there been a falling off and this is to be attributed to the new mode of calculating the sales. In Balasore the sale has increased 12,694 maunds, while in Cuttack it has decreased 35,452 and in Pooree 26,566. This is not satisfactorily accounted for, but the increased price of grain may have something to do with the matter. Salt to the extent of 5,559 maunds has been confiscated during the year, the largest seizure being in Midnapore. The cases undebited have been 1,157 against 1,357 in the preceding year, a fact which taken in connection with the increase of sales, indicate a decrease of the illicit consumption.

The following table shews the prospect of supply for the year:—

	Maunds.
Salt in store on 1st October, 1857,	32,56,000
Expected out-turn of Bengal Agencies,	22,00,000
„ imports from Orissa,	12,00,000
Imported by Sea during 1st Quarter,	15,00,000
Expected imports,	14,73,000
Total,	96,29,000

The usual demand is about sixty-six lakhs of maunds.

The Appendices contain certain statistics which may be thus condensed:—

	Mds.	Rs.
Sales in 1855-56,	24,93,428	77,37,285
„ in 1856-57,	31,46,694	96,88,018
„ of imported salt in 1856-57, ..	34,54,320	
Duty on import salt in 1856-57,		81,76,199
Sale of private salt in 1855-56,	53,033	
„ of private salt in 1856-57,	31,763	
„ of N. W. salt, 1856-57,	6,00,964	

Salt is imported chiefly by Sea, from different Countries in 1856-57 it was:—

NAMES OF PLACES.	1856-57. Maunds.
1st October to 30th September.	
Great Britain,	25,89,823
France,	82,804
Spain, ... ..	.....
Portugal, .. ..	.....
Sardinia,	16,851

Carried forward, 26,89,478

						<i>Maunds.</i>
	Brought forward,	...	...	...	...	26,89,478
Cape de Verd Islands,	..	..	...	...	...	.....
„ of Good Hope,	..	..	...	...	...	.....
Mauritius,	..	...	...	...	..	.....
Red Sea and Arabian Sea,	...	...	...	...	...	4,20,730
Bombay, ●..	..	...	..	..	...	4,21,637
Ceylon,	..	...	...	..	...	16,333
Madras,	..	...	..	...	..	2,46,567
Arracan,	..	...	..	..	...	.....
Tenasserim,	...	...	...	...	...	.....
South America,	...	..	...	..	..	5,172
Total Maunds,						37,99,917

SHIPPING IN RANGOON AND DALHOUSIE.

In 1856-57.

THE total value of imports from ports not in Bengal into Rangoon for the year was 22,35,257. The total value of exports to ports not in Bengal was Rs. 18,79,488. The total amount of duty levied on these imports was Rs. 1,22,276, and on exports 52,604. The value of merchandize free imported besides was Rs. 5,17,205, and total value of free exported merchandize Rs. 2,93,921. The total number of square rigged vessels which arrived was 160 with a tonnage of 66,085½ tons, while 158 departed with a tonnage of 64,017½ tons. Besides 16 native vessels arrived and 21 departed.

The total value of imports into Dalhousie from foreign ports not in the Bengal Presidency was 18,237 and of free imported merchandize 1,49,084. The exports subject to duty were Rs. 3,27,805, and of free exported merchandize to foreign and Indian ports 63,263. 39 square rigged vessels arrived with a tonnage of 12,498, and 38 square rigged vessels left with a tonnage of 11,923 tons. 15 native crafts arrived and 37 left.

COMMERCE AND SHIPPING OF SINGAPORE.

FOR 1855-56.

Prince of Wales Island.

Value of imports from foreign ports,	Rs.	86,74,480
„ treasure, „ „ „ „	..	17,56,694

Re-exported imports,	..	..	..	Rs.	83,56,817
" " treasure,	..	..	..	..	27,26,266
Exports by sea,	..	..	..	..	1,80,69,499
Imports from Calcutta,	.	..	..	..	11,57,376
Re-exported imports from Calcutta,	..	..	..	..	7,09,614
Total number of square rigged ships arrived,				432	
" " " " departed,				399	
Tonnage of square rigged ships arrived,	..	..	..	98,875	.
" " " " departed,				1,33,521	-
Native tonnage arrived,	..	..	..	31,616	
" " departed,	..	..	..	43,630	

Singapore.

	<i>Singapore.</i>	Rs.
Imports from all ports,	4,05,37,114
" treasure,	1,08,82,109
Exports,	3,12,27,961
Treasure,	1,29,93,555

Malacca.

			<i>Malacca.</i>				<i>Rs.</i>
Imports,	...	..	..	..	...	..	24,45,433
Treasure,	..	..	..	..	..	..	11,91,845
Exports,	...	...	..	..	...	...	19,45,225
Treasure,	..	...	...	..	..	..	7,58,832
Tonnage of square rigged	arrivals,	...	37,714				
"	departures,	..	37,138				
Native arrivals,	...	..	...	...	24,574		
"	departures,	...	..	...	52,803		

IRRIGATION IN THE MADRAS PROVINCES.

IN 1853, Lieutenant Colonel Baird Smith having obtained the permission of the Court of Directors, visited all the great works of irrigation either constructed or in the course of construction in the Madras Presidency. The information thus collected was afterwards published by order of Lord Dalhousie, and is in effect a complete account of the works constructed on the Cauvery, Kistnah and Godavery for the irrigation of the tracts of land adjacent to these rivers.

The works in the Delta of the Cauvery were those first visited by Lieutenant Colonel Smith, who considers the gradual development of the system of irrigation in that Delta to be of so interesting a character as to merit account. He traces the first marked development of the native system to one Rajah Veeranam. This monarch invaded Tanjore from the Teligoo country,

at once appreciated the system of irrigation even then practised by the subject race and cut the great irrigation channels in Tanjore. The following is the general outline of the system pursued by the natives of that and subsequent ages:—“Channels of supply, proportioned in dimensions to the area of the tract dependent upon them for irrigation, were cut from the river bank, and supplied sometimes with head-sluiques of masonry, but very often wanting in these necessary works. The levels of the heads were so arranged as to command a full supply in moderate floods, and the water was led to the fields by infinite numbers of smaller channels of distribution. When the level of the river surface was too low for the supply of the channels, the construction of a permanent masonry, or a temporary earthen dam, was had recourse to, and the water was thus raised to the requisite height. Of the masonry dams, several still remain; and one, bearing the name of the ‘Grand Annicut,’ (the latter being the local term for this class of works), continues to this day to play an important part in the irrigation of the Delta. Not only was the main stream thus laid under contribution, but those minor channels diverging from it as it approached the sea were also taken possession of, and hand-in-hand, so to speak, with this process of utilising the waters in moderate floods, there advanced a system of embankment whereby the waters in extreme floods were held under general control. Thus, in progress of time, there grew up over the whole surface of the Delta an extremely artificial condition of things, the cardinal points of which were, 1st, the supplying of agriculture with its first necessity, abundance of water; and, 2ndly, the protection of the property thus created on the soil from the destructive effects of an excess of water.”

But in all native schemes there was one great object entirely lost sight of. No heed was paid to the means of inter-communication. Thus while the soil was fertilized by irrigation, its produce could either not at all or with great difficulty find its way to market. “As subsidiary to the general plan of river irrigation, tanks were largely employed, and were formed on such a scale as fairly to be denominated gigantic. The embankment of the Poonary Tank, in the Trichinopoly district, for example, was 30 miles in length; that of the Veeranam Tank about 10; and numerous others, of scarcely inferior dimensions, are scattered over the face of the country. These great reservoirs were variously supplied: some by channels cut direct from the Cauvery, or its main branch the Coleroon, so adjusted in level as to take advantage of the waters in moderate or high freshes, as might be most convenient; others were dependent upon minor streams across whose valleys the embankments were thrown;

while others, again, were filled by the escape waters of tanks on higher ground. All were provided with sluices for distributing the water to the fields, with escape weirs for regulating the surface level of the water, and with such other works of detail as were necessary."

In 1801 the Tanjore country was ceded to the British and the task of maintaining and improving the system of native irrigation pursued in those provinces devolved upon the Supreme Government.

The most important works of irrigation were those connected with the Cauvery, a map of whose Delta, shewing the system of irrigation pursued is appended to the report. That river rises in the Western Ghats and drains a basin estimated at nearly 32,000 square miles. Its supplying streams are fed by both monsoons, so that from June to December inclusive its volume is abundant. The discharge of the river at its head was in December, 1833, 16,875 cubic feet per second, and as the rise of the river in high flood is proportioned to its condition at the time of measurement as 19 to 1 the discharge then must be 3,20,625 cubic feet per second. It is not until the river reaches the western part of Trichinopoly that its capacity for irrigation becomes fully developed. Here at Seringham the main river divides into two channels the southern of which retains the name Cauvery, while the northern is called the Coleroon. The fall of the river above the point of separation is three and a half feet per mile, but this rapidly decreases till about seventy miles below Seringham the fall of the Coleroon is only two feet per mile and towards the sea the average fall is only one foot per mile. The fall of the Cauvery branch is about $4\frac{1}{2}$ inches less than that of the Coleroon. The Coleroon besides having a greater fall differs from the Cauvery "in having a much more direct course to the sea and in having its volume of water but little diminished for purposes of irrigation." The natural result of such a combination is the progressive deterioration of that branch which is least favourably circumstanced and the consequent diversion of the main body of the stream into the superior channel. This fact was ascertained about 1804 by Captain Caldwell of the Engineers and in consequence "the old native work called the Grand Annicut, of which there is a plan in the report, at the lower extremity of Seringham, was raised considerably, so as to retain a larger quantity of water in the Cauvery below it."

The remedy was but partial, the river channel continued to deteriorate till in 1829-30 a crisis was reached, and at that time began a series of operations of which the final issue has been

the establishment of the relative conditions of the Cauvery and Coleroon on an entirely satisfactory basis.

It had been discovered by Captain Caldwell that the great native Dam, which had effectively withstood the floods of 1600 years was composed merely of rough stones and clay without any kind of cement. It was therefore "clearly possible to construct another in which the resources of European skill could be employed to reduce the dimensions by the use of superior materials, and thus to bring the cost within such limits as would fully justify the Government in undertaking it."

Prior to the construction of any permanent works in the beds of the Cauvery and Coleroon the area of irrigation dependent on these streams was as follows:—

1. ON THE CAUVERY.				2. ON THE COLEROON.			
<i>Acres.</i>				<i>Acres.</i>			
In the Trichinopoly Districts, ... ..	...	...	16,500	In Trichinopoly, ... ..	...	...	36,300
In the Tanjore Ditto, ... ..	...	...	488,400	In Tanjore, ... ..	...	...	69,300
				In South Arcot, ... ..	...	...	59,400
<hr/>				<hr/>			
Total, ... ..	...	...	504,900	Total, ... ..	...	...	165,000

Therefore a supply of water sufficient for the complete irrigation of 6,69,900 acres had to be provided. The constant of irrigation for rice is, during the period of the crop, 3 cubic yards of water per hour per acre, or according to the standard measure of the North West Provinces 0.025 cubic feet per second per acre. The total volume therefore required for the irrigation of 6,69,900 acres was 16,747.5 cubic feet per second.

The quantity of water required for the areas of irrigation of each branch were as follows:—

Coleroon, 165,000 acres at .025	} 4,125 cubic feet per second.
cubic feet per second, ..	
Cauvery, 504,900, " "	12,622 " "
<hr/>	
Total,	16,747 " "

The distribution was in December, 1853 as follows:—

In the Coleroon Branch,	7,500 cubic feet per second.
In the Cauvery ditto,	9,375 " "
<hr/>	
Total,	16,875 " "

Thus the volume of the Coleroon was just so much too great for the area of irrigation as that of the Cauvery was too small. To adjust matters, the excess in one branch had to be thrown into the other. This task devolved upon Colonel Cotton. And the method he proposed was "to throw a Dam (or Anicut) of masonry across the bed of the Coleroon, the crown of which

should be fixed at such a height as would ensure about half the supply of that branch in the average state of the river, during December and January, passing into the Cauvery." A plan of the annicut eventually constructed is to be found in the report.

The height of the Coleroon Dam was determined by trial, but at first Colonel Cotton gave such a height to the annicut that when the water was even with the top of the one he proposed to construct, it would be even with that of the grand annicut. "In its original form, the Coleroon Dam consisted of a simple bar of masonry 750 yards in length, divided into three parts by the interposition of two small islands formed in the bed of the stream. The thickness throughout was 6 feet. This bar, forming the obstructive portion of the Dam, rested on a foundation of masonry 3 feet deep, built on three lines of wells 6 feet in exterior diameter, and sunk to a depth of 6 feet in the sandy bed of the river. In rear of the bar, there was an apron of masonry 21 feet broad, and covered with cut stone 1 foot in thickness, carefully laid in hydraulic cement. Below the apron, a mass of rough stone, from 9 to 12 feet broad and 4 feet deep, was formed to protect the junction of the apron and river bed. Twenty-two openings or sluices, originally 2 feet in width by $3\frac{1}{2}$ in height, were distributed throughout the length of the Dam, their sills being on the same level as the apron or the bed of the stream. The object of this arrangement was to afford free passage to the sand, and, if possible, to prevent the bed of the Coleroon above the Dam being raised by deposits. We shall find hereafter how ineffective it has proved."

The effects that were produced by the Coleroon Dam on the stream were three-fold:—"First it raised the bed of the Coleroon itself, by the slow but certain progress of deposit above the Dam. This was a contingency clearly foreseen by Colonel Cotton, and provided against by the two and twenty sluices through the body of the work to which I have already alluded. These, however, proved to be wholly inadequate to produce the effect expected from them; they furnished a water way for scouring out the bed of only (22 by 21) 44 feet in width of a channel very nearly 2,200 feet broad."

In 1843 at the suggestion of Colonel Sim complete cuts in the annicut ten or twelve feet in width were made, but they produced but little result.

"The second effect of the Coleroon Dam was to throw a very largely increased volume of water into the Cauvery during freshes. This too was, of course, foreseen, and provided for by six grand outlets of which there are plans in the report."

These means of regulating the Cauvery were not sufficient, the Coleroon branch was obstructed by heavy deposits and sand

banks above the Dam, whilst the bed of the Cauvery was deepened and its banks eroded. It seemed probable that the condition of the streams would be reversed from that which they held before the construction of the Coleroon Dam. As a remedy the Coleroon Dam was lowered two feet, this was found however to be insufficient and eventually a masonry regulating Dam was constructed across the mouth of the Cauvery. The report contains a plate shewing plan elevation and section of the regulating Dam. The regulating Dam was perfectly successful, the regulation of the beds of the streams and the distribution of the water is now as perfect as could be desired.

“The third and last effect of the Coleroon Dam to which it is necessary to advert, is the influence of the work on the volume of the branch across which it is thrown, and on the irrigation dependent upon this. The principle on which the division of the water in the main stream was based being, that none should flow over the Coleroon Dam until the wants of the Tanjore district had been provided for, it is clear that, in average conditions of the river, the practical effect of this arrangement would be to divert nearly the entire volume of the main stream into the Cauvery branch, and thus to leave the channel from the Coleroon dependent on the drainage, escape water, springs in the bed of the river, or other minor sources of supply. These combined had been found to furnish a volume sufficient for the irrigation on the lower Coleroon; but, as the abstraction of so large a portion of the former supply of the river, by means of the Dam, would of course very much lower its surface level, all the old channels in South Arcot would have been thrown out of use, and the levels of the village watercourses wholly deranged. A Dam across the Coleroon at the head of the irrigated district of South Arcot of such height as to restore the old surface level of the water, became, therefore, absolutely necessary.” The Dam was therefore constructed and has effected its purpose “in maintaining the irrigation of South Arcot, and a small portion of Tanjore, in a very satisfactory manner.”

Both Dams interfere considerably with the navigation of the Coleroon. At the upper Dam the Cauvery is open for navigation, but at the lower Dam so late as 1851 there were heavy “complaints of the inefficiency of the means of navigation.”

The following is an estimate of the financial results:—

“Total expenditure for original works		
between 1836 and 1850,	Rs. 9,18,740 or	£91,874
Ditto ditto ordinary repairs ditto,	8,93,720 „	89,372
Totals,	Rs. 18,12,460 „	£181,246

"Now the gross returns for the same period amounted to Rs. 48,00,000 or 480,000*l.*, and the net returns (obtained by deducting the amounts for ordinary repairs and 5 per cent. per annum interest on the total capital invested in the works) are Rs. 32,17,255, or 321,725*l.*, 10*s.*, being a clear annual return of Rs. 2,14,483, or 21,448*l.*, 6*s.*, on a capital of Rs. 9,18,740, or 91,874*l.*, being nearly 23½ per cent."

The report on the Cauvery concludes by the following summary of those points of professional interest which the works in Tanjore seem to establish:—

"1st. That the waters of large rivers may be distributed between their branches in proportions sufficiently exact for practical purposes, by the use of Dams at the points of separation, having their crowns at such heights as experience in each case may prove to be necessary. No general rule regulating these heights seems as yet to be possible; but as the field of observation extends, it may be arrived at hereafter.

"2nd. That the influence of such Dams, judiciously established on the beds of the rivers, in regulating the currents, in equalizing the distribution of deposits, and in maintaining the permanency of the sections of the beds, may be very beneficial.

"3rd. That in rivers with beds of pure sand, and having slopes of 3½ feet per mile, such Dams may be constructed and maintained at a moderate expense.

"4th. That the elevation of the beds of the rivers above the Dams to the full height of the crowns of these works is an inevitable consequence of their construction, and that no arrangement of under-sluices has, as yet, been effective to prevent this result.

"5th. But, that where effective escapes are provided in the banks of irrigating rivers (like the Cauvery), the entire volumes of which are absorbed in irrigation, it is possible to prevent any injurious elevation of the bed by sand deposits.

"6th. That in pure sand acted on by the current due to a fall in the river-bed of 3½ feet per mile, and exposed farther to the action of floods from 12 to 15 feet deep, well foundations, in front and rear, of 6 feet in depth, have been proved by an experience of 15 years to be safe.

"7th. That with a vertical fall in rear of the Dám from 5 to 7 feet in height, a thickness of 2 feet of brick masonry, and 1 foot of cut stone, with a breadth of from 21 to 24 feet for the apron, have proved sufficient to insure stability, the only farther protection required being a mass of rough loose stones about 9 feet in width and 4 in depth. As a rough general rule, it would seem that the masonry apron should have a thickness equal to half, and a breadth between three and four times the

vertical height of the bar forming the obstructive part of the Dam. The loose stone apron should at first have a breadth equal to $1\frac{1}{2}$ times, and a depth equal to two-thirds the height of the Dam. The action at the tail of the work leading to constant additions to the loose stone soon deranges these proportions, and they are given only as guides in the first instance.

"8th. That the main security of the Dam depends upon the efficient construction and careful maintenance of the apron.

"9th. That in freshes the Dam speedily receives the protecting effect of a backwater on the apron; the surface level of the down stream side being level with the crown of the work when the floods rise to 8 feet above ordinary low water, while beyond that depth the fall over the Dam gradually diminishes till in 16 feet floods it has wholly disappeared, and scarcely even a ripple on the surface indicates the existence of the mass of masonry below.

"10th. That looking to the cost of the works executed between 1836 and 1853, and the increased area of irrigation due to them, the capital sunk amounts only to Rs. $6\frac{1}{2}$, or about 13s. per acre.

"11th. That after deducting every expense which the irrigation works of the Cauvery have entailed on Government, the net returns may fairly be estimated at not less than $23\frac{1}{2}$ per cent on the invested capital."

The next works of irrigation visited were those on the Kistnah, a map of whose delta "is appended to the report." The Kistnah rising a little to the north of Sattara in the Bombay Presidency "flows for about half its course in a direction from north-west to south-east; then turning abruptly to nearly due east it pursues its course for about 180 miles on this bearing, generally, though with local changes; and finally, making a third sweep to the southward, it enters the sea about 35 miles to the south-westward of the port and station of Masulipatam. Its total length may be estimated approximately at about 600 miles, and the area of its drainage basin at from 25,000 to 30,000 square miles. It enters the low flat country between the high land and the sea coast at a distance of about 80 miles from its mouth, and both its banks below Bezwarah spread out in rich alluvial plains forming part of the Madras districts of Guntur and Masulipatam."

In its progress towards the sea the Kistnah bed falls at about the rate of 11 to 13 inches per mile and the supply of water is perennial, increasing enormously in the rains. It is only after the stream has debouched into the plains that it becomes useful for irrigation. Its course in the plains is about 70 or 80 miles in length and its bed varies from about $1\frac{1}{4}$ to $2\frac{3}{4}$ miles in breadth. Its depth from crest of banks ranges between 20 and 40 feet.

Bezwarah is the site selected for the Dam and the report contains a plate shewing plan, sections, and elevations of the Kistnah annicut and works then established. "The Kistnah, therefore, like the majority, if not the whole, of the Deltaic Rivers, runs on the crest of an elevated ridge formed by its own deposits during a long series of years; this ridge slopes rapidly from the channel, less and less rapidly as we recede from this on either side, and to the eastward the long slope terminates in the basin of the Colair Lake. The facilities offered by this natural arrangement for the introduction of a system of artificial irrigation, are self-evident. By establishing channel heads on the river banks at the apex of the Delta, and by securing there such a height of water as the levels of the lands to be irrigated may require, we have it in our power to place the whole tract under command, and to secure the products of its culture to an extent only limited by the volume of water at our command."

Notwithstanding these natural advantages no attempt was made to regulate the supply of water until very recently, and for eighty years the history of the country on the Kistnah is but a dreary waste varied only by the occurrence of famine or pestilence. In 1833 the failure of the rains affected all the country below the Ghauts. In Guntoor the results were terrible and it is calculated that not fewer than 200,000 people perished either from hunger, or under the virulent fever that followed in the train of famine. At this moment the population of Guntoor have not recovered the effects of that "black year." The Government revenue suffered too, and the loss may be estimated at ninety lakhs of rupees. "It is to prevent the recurrence of such sacrifices of life, and the means of life, on the part of the native community, and of revenue on that of the State, that the works on the river Kistnah are designed. They embrace both banks of the river, affecting on the right the Guntoor, and on the left the Masulipatam districts, containing an aggregate population of 1,100,000 souls, and an area of nearly 10,000 square miles, of which one half, or rather more than three millions of acres, may be regarded, within reasonable limits of error, as the culturable portion."

The report here contains a general description of the Dam at Bezwarah in process of construction when Lieutenant Colonel Baird Smith visited the works and a plan of the annicut is appended. He reported the Dam as likely to effect the object for which it was intended. Generally, "the Kistnah Annicut or Dam is designed to supply nearly 290 miles of channel, judiciously distributed on both banks of the river. It is perhaps below its capabilities to say that it secures, during the season of cultivation, not less than 7,000 cubic feet

of water per second, which is sufficient to bring to maturity 2,80,000 acres of rice cultivation, and probably 350,000 of mixed rice, sugar and possibly cotton. A moderate estimate of the ultimate returns from this increased area of irrigation is Rupees 6 lakhs, or 60,000*l.*, per annum, to the Government, and 9 lakhs or 90,000*l.*, to the agricultural community. Failure of the monsoons will, hereafter, cease to be a fearful calamity and where neither man nor beast can now exist from the want of water for the common purposes of life, there will, in all time to come, be an abundant supply for every want, domestic and agricultural. The whole of these results, which, after all, are only a portion of the benefits to be anticipated from the works under review, will be executed without strain on the resources of the State, the total estimated outlay amounting only to 15½, though it may possibly rise to 20 lakhs of Rupees or 200,000*l.*”

With regard to the facilities of internal navigation afforded by the existence of so many miles of canal, Lieutenant Colonel Baird Smith observes:—“Every irrigation channel may become a highway for boats and the whole produce of the Delta be conveyed by such means from the interior to the sea coast, or from one mart in the interior to another. To maintain the freedom of circulation between the river and the channels, masonry locks have been provided near both flanks of the Dam at Bezwarah. These works are substantial structures of stone masonry, with chambers 150 feet in length and 16 in width, fitted with all the requisite machinery in gates, sluices, &c., for passing craft from the level above the Dam to that below it, and *vice versa*. They appear to be open to but one objection, due to their being placed in too close a proximity to the head-sluices of the channels and the under-sluices of the Dam. On the right bank, the lock is only about 250 feet from the former of these works, and 800 feet from the latter; while on the left—the most important of these distances—that from the under-sluices is diminished by nearly one-half. Now there is always action, more or less violent, in the current near the Dam, and this becomes exaggerated when the sluices are in operation. Judging from observations made on similar works in similar positions elsewhere, I fear that craft entering the locks will do so with considerable inconvenience, and occasionally with serious risk. Farther, the works themselves are much exposed to accidents; and this evil is far from being an imaginary one. I admit at once the inconvenience of detaching these works from the general series—they then require separate supervision, the cost is higher, and the compactness of the design is interfered with; but allowing their full force to all such

objections, they cannot equal the inconvenience and injury consequent on the partial or total destruction of the locks, or even their prolonged inefficiency while under frequent repair. The result inevitably is, that native confidence in the works is impaired, and men are unwilling to risk their boats or their goods under circumstances where both are exposed, if not to utter loss, certainly to detention and the injury consequent upon it. Locks directly connected with Annicuts have not hitherto been successful works: they have failed entirely on the Cauvery, they are constantly being damaged on the Godavery, and I have no doubt that one cause of these accidents has been the unfavorable positions in which the locks have been placed with reference to the action of the current. I would therefore have been disposed, myself, to have carried the heads of the navigable channels considerably farther away from the flanks of the Annicut than they now are, and to have borne the additional expense caused by the greater length of channel thus rendered necessary, which, however, after all, would have been very immaterial, if security and efficiency beyond what now exist, could thereby have been insured for the internal navigation."

The next irrigation works visited by Lieutenant Colonel Baird Smith were those connected with the Godavery. The report on these commences with the general observation that the periodic famines of India have been the precursors of all great irrigating works. "To the famine of 1837-38, Northern India owes the magnificent project of the Ganges Canal; to the like visitation of 1833-34 Southern India is indebted for the extensive works on the Kistnah already described; and to the same source, the yet more extensive operations in the Delta of the Godavery may be proximately traced."

It was not until 1844 that any attempt was made to banish famine from the delta of the Godavery. There was then a yearly deficit of five lakhs of rupees from the Rajahmundry district alone and a steady decrease in the number of the population throughout the delta. The works sanctioned by the Government in 1846 were designed to effect great permanent improvement. To the report is appended a map of the delta of the Godavery shewing the position of annicut, channels, and embankments; and the proposed new channels.

The Godavery with its heads situated about the parallel of 20 degrees north latitude and between 72 and 73 degrees east longitude has a "course in rude parallelism to that of the Kistnah, which may be roughly estimated at about 650 miles in length. Its basin of drainage has, however, fully twice the capacity of that of the Kistnah, and its stream is swollen by a series of

great feeders on both sides, collecting the waters of a tract of country not less than 60,000 square miles in extent, and consisting of mixed mountain and plain surfaces. Its whole valley is under the full influence of both monsoons, and its supply is perennial; being comparatively small, of course, during the dry season, but enormously increased during the rains. It is calculated that, at the minimum height of the stream during the year, a volume equal to somewhat more than 3,000 cubic feet per second may always be reckoned upon, while during the rains the available supply for agricultural purposes may be estimated at not less than four times this quantity, or 12,000 cubic feet per second. There are, of course, periods when the volume of the river is far greater than this latter amount; but for practical ends, and as measures of the capacity of the stream for irrigation, 3,000 and 12,000 cubic feet per second may safely be assumed as the constants of discharge during the dry and wet seasons respectively."

The fall of the river bed is very irregularly distributed. There are fords at various points in which the summer water stands from 3 to 4 feet deep and between these shallow spots are extensive pools, from 26 to 36 feet in depth. Taking the entire length of the river channel into account from Palaveram to the ocean the effective fall is not more than from 5 to 6 inches a mile. The high flood surface level of the river falls toward the sea at an average rate of from 15 to 18 inches per mile.

The fall of the country on the right bank towards the east and on the left bank towards the west is much more rapid than towards the sea.

Hence the river runs on the crest of a natural embankment ranging from a minimum of 6 feet to a maximum of 24 feet in height above the level of the country two miles distant on each bank. It is scarcely possible to conceive an arrangement better adapted for facilitating artificial irrigation works.

The best site for a Dam is the head of the delta proper at Dowlaisweram. There it was found that a Dam 12 feet in height would give an efficient command over the whole irrigable surface of the country, about 2,000 square miles, and that 10½ miles of channels, in which the mere depth of digging did not exceed 10 feet would be sufficient to deliver the water of irrigation on the surface of the land.

The report contains plans of the Godavery and Dowlaisweram annicuts with head and under sluices.

There are four classes of works "required to raise the Delta of the Godavery to the highest degree of productiveness of which it is capable. They are—

"First,—Works of irrigation proper, being Dams and at-

tached channels whereby the water would be delivered on the surface of the country at efficient levels.

"Second.—Works of drainage, being channels of escape for the surplus water of floods or irrigation thrown over the surface of the country at inappropriate seasons, or likely to stagnate for excessive periods.

"Third.—Works of protection, being embankments to the river channel sufficiently high to prevent the monsoon floods swamping the crops, and generally devastating the low tracts by annual inundation.

"Fourth.—Works of communication, being navigable channels wherever they can be obtained, and roads sufficiently embanked and bridged to preserve the cross communication during the rainy season

"At this present time none of these series are perfected, but the three first are in active progress, and have already led to satisfactory results. As regards the fourth, a large extent of navigable channels fitted with locks exists, but no raised roads have yet been commenced, and till they are carried to such an extent as to make transit practicable during the rains, the Godavery Delta will continue to be inferior to that of the Cauvery, the latter being abundantly supplied in this particular way."

The report here contains a minute account of the Godavery annicut. Viewed as a whole it "consists of a masonry Dam in separate portions, the united length of which is 11,866½ feet, or 3,955½ yards, being very nearly 2½ miles of river channel blocked up by a solid, substantial, well protected mass of stone in lime cement, or without it, according to position, having a total breadth of base equal to very nearly 180 feet, and height of crest or sill equal to 12 feet. The three main objects of the Dam—clearance, irrigation, and transit—are provided for by three separate sets of works, one on each mainland flank, and one at the head of the central tract. The under sluices discharge the necessary functions for the first object, the head sluices those for the second, and the navigable canal and locks those for the third. Along the entire length of the masonry Dam is carried a line of cast iron uprights about 6 inches square, and 8 or 10 feet apart, having grooves on each side for the reception of 2½ feet of planking, whereby the water can be retained to that height above the sill during the dry season, and a larger volume be thus thrown into the irrigation heads."

To the last arrangement serious objections have been expressed.

The report goes on to describe minutely the local details of the distribution channels and plans and sections of the Purimillu

Double Lock, the Mookamala Lock, the Chettypett Calingulah and the Gunnarum Aqueduct.

Considering the subject comprehensively, the irrigation system of the Godavery consists:—"First, of the river itself, furnishing a supply for the rice crop of 12,000, and for the sugar crop of 3,000 cubic feet per second. Second, of the great Dam or Anicut at Dowlaiswaram, whereby the above volumes of water are raised to a level sufficiently high to command the entire surface of the Delta, and of its attached works, whereby the passage of the supply is facilitated. Third, of 840 miles in all of main channels, whereby the water is distributed far and near over the irrigable area, and brought within command of every village in the Delta. The work which will ultimately be done by the machinery thus briefly described will be the perfect irrigation of 780,000, or considerably more than three-fourths of a million of acres of the richest alluvial soil. No one will question the noble proportions of such a project as this; and if it be carried on with earnestness and vigour, the most cheering anticipations may be indulged in regarding its results."

It is still however far from complete. No provision has yet been made for high floods, though they do not rise more than from 2 to 4 feet above the crest of the banks. It appears that for this purpose about 200 miles of embankment will be required. General drainage is being actively carried on, but with regard to roads and bridges nothing whatever has been undertaken.

With regard to the channels of the Godavery Delta irrigation, Lieutenant Colonel Baird Smith noticed their exceeding irregularity of alignment. He doubts the ultimate economy of the adoption of these old and tortuous lines. More especially as the Home Authorities have already sanctioned an outlay of £15,000 on the construction of 25 miles of new channel for the Eastern Jumna Canal expressly to get rid of those twists and low levels which the adoption of the old line entailed.

Finally Lieutenant Colonel Baird Smith reviews the financial history of the Godavery irrigation. The cost of the works was at first estimated at twelve lakhs of rupees, but this sum was expended before half the works were complete. A supplemental estimate was afterwards submitted, which with the amount already expended in excess of the estimate amounted to Rupees 9,76,951. Still there remained works of distribution, embankment, drainage and communication. For these new provisions had to be made and the Supreme Government expressed in strong terms its dissatisfaction. Up to the spring of 1853 the

total expenditure had been fifteen lakhs, leaving nine lakhs for the work remaining to be done. This sum would not however complete the whole scheme.

With regard to the anticipated return from these works, the report estimates it at from 50 to between 62 and 63 per cent. on the invested capital.

The report concludes with the following general summary:—
 “It has been shown that the projects either actually executed or in progress of execution, affect tracts of country containing in the aggregate a total area of fully 20,000 square miles, or 12½ millions of acres, whereof one-half may be considered as either cultivated or culturable. This aggregate area is inhabited at present by a population numbering rather more than 4 millions of souls, whose material condition ranges from that of the utmost comfort in Tanjore to that of the utmost depression in Guntoor; but among whom one standard, and that the highest, will ultimately prevail. Of the 6 millions of acres adapted to irrigation, not less than 2 millions will have a full supply provided for them, at a cost which, in its utmost extent, cannot exceed half a crore of rupees, or half a million sterling, in the aggregate; and the annual revenue obtained by the State, on which this powerful stimulus will operate, reaches at this moment to 1¼ millions of pounds, and may be expected to advance progressively to rather more than 2 millions per annum. The million and three-quarters of people forming the population of Tanjore pay, on the average, very nearly 2½ rupees, or 5 shillings each per annum to the State. The 2 millions forming the population of Rajahmundry, Masulipatam, and Guntoor, pay similarly an equal sum. In the first case, the area of taxation amounts to 3,900 square miles; in the other it rises to nearly 17,000 miles; the sum is in the one case paid by a population amounting to 430 in the square mile, occupying a fertile, well cultivated, and well watered region, productive in the highest degree, and the payment is therefore made cheerfully, and balances in arrears are practically unknown; in the other it is paid by a population averaging not more than 130 on the square mile, poor, scattered, depressed, and the payment is therefore reluctantly made, and is a heavy burden evaded whenever practicable, and hence much in arrears. As the population of the Kistnah and Godavery Deltas rises to the standard of Tanjore, under the operation of the same causes to which this standard is due, we shall have these two regions inhabited by upwards of 7 millions of souls, instead of only 2, as at present, and as they will be far more able then than now to pay their 2½ rupees each, as their annual contribution to the expenses of the Government, we shall have a total revenue of

a crore and three-quarters, or $1\frac{3}{4}$ millions of pounds, instead of the 60 lakhs or 600,000*l.* a year we now derive from them. The ultimate income from the three Deltas, may therefore be expected, in course of time (which will be shorter or longer according to the liberality and earnestness of the Government in pressing forward the works to completion), to become $2\frac{1}{4}$ crores of rupees, or to $2\frac{1}{4}$ millions of pounds per annum."

As a termination to the report on the irrigation works of the Madras Presidency, Lieutenant Colonel Baird Smith makes a brief reference to the examples of the tank irrigation system in Madras and appends in illustration of his remarks the following plates :—

" I. Sketch of the Chumbrumbaukum Tank.

" II. Plan of part of Chumbrumbaukum Tank, showing the breach made in the bank on the 3rd January, 1818, at the Mannapaukum Sluice.

" III. Plan and Section of the alteration proposed to the Coonatoor Sluice.

" IV. Plan, Elevation and Sections of the Mannapaukum New Sluice.

" V. Survey of the Palar Channel Supply to the Cauverypauk Tank.

" VI. Plan and Section of the proposed Sluice for the Cauverypauk Tank."

The tank system of Madras is essentially native in its origin and is destined to grow up in connection with our local canal system.

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EDITED BY
MEREDITH TOWNSEND.

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1858.

ADVERTISEMENT.

THE Governments of India publish on an average a volume every four days. From Reports affecting the entire Empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha bye-road in a frontier province, every thing finds a place in these publications. There is scarcely a subject connected with Indian Administration on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is, however, widely scattered. The Records of one Presidency are scarcely known in another. The books are not very readily procurable, and above all they are like all other Blue Books dry, indigested, and overlaid with detail. It costs an hour to find a fact, and in India men who care about facts cannot spare hours.

The object of the Compiler is to remove this defect, to do for the official information of India what Mr. Leone Levi is doing for the Blue Books of England. The Annals will comprise every fact, and almost every opinion of importance in the records of the Quarter. A copious Index will enable the reader instantly to refer to the subject of which he is in search, and any peculiarity of opinion and even of style is carefully retained.

A word may be necessary on the arrangement adopted. It is intended that the most important subject should have the largest space, but in estimating the relative importance of the records the Compiler has been compelled to rely on his own judgment. Usually all subjects of imperial interest have the preference, statistics occupy the next place, and subjects purely historical the last. They are not very important, and not at all interesting, but they can only be condensed to a certain point.

THE
ANNALS
OF
INDIAN ADMINISTRATION.

THE NAVIGATION OF THE GOGRA.

North-Western Provinces Records, Part XXXI.

THE report is dated the 15th February, 1858, and is from Mr. R. Taylor, Assistant Magistrate and Collector at Benares.

The report contains sketches of the river exhibiting its course and the nature of its bed. Under the Chupra Bank is a mouth of the Gogra containing very little water. The true mouth lies higher up. Steamers used formerly to proceed up the Gogra as far as Revelgunge re entering the Ganges by a branch below Manghee. The route has been abandoned. To the end of the Ghazee poor district the channel presents no marked difficulties. The Azimghur bank rises to a height of forty feet. The channel lies near the right bank. The most dangerous navigation is from a place about half a mile below Huldice. The report mentions the best anchoring places for the several stations. Generally the state of the mouth is the great obstacle to the easy navigation of the Gogra. The report suggests that dredging machines should be employed to keep it open.

REPORT ON THE AGRA MEDICAL SCHOOL.

North-Western Provinces Records, Part XXXI.

THE report is from Dr. Murray, dated the 1st April, 1858. During the rebellion "the hospital and school remained intact." The Sub-Assistant Surgeon Wazeer Khan joined the mutineers, he was wounded at Delhi, and subsequently served against

the British troops in Oude. Out of 18 students of the 3rd year present on the 6th April, 1857, one died, one was made a native doctor, two were dismissed and ten left or ran away. Out of 15 students of the second year, five left or ran away and two were dismissed, of 23 vaccinators from Rohilcund 20 left or ran away. Of 33 students admitted on the 6th April, 1857, 19 left or ran away. On the whole out of 117 students present on the 6th April, 1857, 59 ran away, left or were dismissed.

The school during the year 1857-58 was ably superintended by Dr. T. Farquhar, who received the special thanks of the Governor General on the 3rd May, 1858. Dr. Farquhar in his report on the school mentions that on account of the rebellion "in their general conduct, the students seemed to be aware of the propriety of behaving with more than ordinary care, so that I was obliged to punish by fine, only twice during the ten past months."

THE CIVIL ADMINISTRATION OF THE MADRAS PRESIDENCY.

For the year 1856.

THE report of the Sudder Udalut is for the year 1856. To the report are attached no remarks, it consists merely of a mass of tabulated statistics.

The following table shews the nature of the litigation in the Madras Presidency as drawn from the original suits filed during the year in the Zillah Courts:—

	For Land.		For Houses or other fixed property.		Arrears of Rent or Revenue.		Bonds.		Simple Debts.		Damages.		Allowances and other personalities not included in the above.		Total.	
	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.	No. of suits.	Amount.
In 1855,	7,566	13,56,240	2,020	6,78,246	1,137	1,39,506	70,799	42,61,079	15,541	6,97,367	528	2,18,379	7,986	6,29,441	1,05,577	79,80,335
In 1856,	8,753	34,54,599	2,261	7,43,365	1,226	1,26,792	80,904	51,18,719	17,950	7,85,225	580	1,07,281	9,890	8,33,996	1,21,564	111,49,989
Increase,	1,187	20,98,359	241	65,119	89	0	10,105	8,57,640	2,409	67,858	52	0	1,904	2,04,555	15,987	31,69,664
Decrease,	0	0	0	0	0	714	0	0	0	0	0	0	0	0	0	0

In these suits 35,597 ryots were plaintiffs and 1,34,773 were defendants; of merchants and others 1,47,025 were plaintiffs and 1,49,657 were defendants; of zemindars 15,085 were plaintiffs and 16,163 were defendants; of renters 6,152 were plaintiffs and 21,756 were defendants.

The abstract of the litigation in the several zillahs as drawn from the result of the suits is as follows:—

	Total number of Original Suits decreed	For Plaintiffs.	For Defendants.	Total number of Appeals decreed.	For Appellants.	For Respondents.	Per-centage.	Per-centage.
In 1855, ...	43,659	37,872	5,787	3,662	1,599	2,063	86	43
In 1856, ...	47,043	40,747	6,296	3,790	1,674	2,116	86	44
Increase, ...	3,384	2,875	509	128	75	53	...	1
Decrease, ...	...	...	...	...	...	...	...	...

The average duration of each original suit was one year one month and two days shewing a decrease of two months and seventeen days over the returns of 1855. The average length of each appealed suit was one year one month and five days shewing a decrease as compared with 1855 of one month and twenty-three days. If the duration of appeal suits is calculated from the original plaint then their average duration was two years nine months and twenty-one days, these returns only exhibit a decrease over those of 1855 of one month and fifteen days. The costs of 1856 as compared with those of 1842 were invariably greater.

The report here contains a tabulated statement of the results of 1856 as compared with those of 1840, 1841, 1842.

The village punchayets decreed during the year on five cases all of which were decided in favour of the plaintiff. The Village Mconsiffs decided on 6,295 cases of which 5,570 were given in favour of the plaintiffs and 725 in favour of the defendants. The total number of cases disposed of during the year was 1,03,976. The district punchayets decreed six cases of which five were decided in favour of plaintiff and one in favour of defendant.

The number of District Moonsiffs is 127. They decreed on merits 39,036 cases, in favour of the plaintiff 33,918 cases and in favour of the defendant in 5,118 cases. The number of appealable decrees passed during the year was 23,293 and the number of cases appealed within the year was 4,910, shewing an increase of 1,503 over the appealed cases of 1855.

The next table classifies the suits disposed of according to the value of the property in litigation.

The Sudder Ameens decreed on merits 1,012 cases, 758 were decided in favour of the plaintiff and 254 in favour of the defendant. There were 2,936 applications for execution of decrees, none of which were entirely unadjusted but 993 were struck off the file for want of assets.

The number of appealable decrees passed by the Sudder Ameens during one year was 1,012 and the number of appeals during the year was 547.

The next table classifies the suits disposed of by the Sudder Ameens according to the value of the property in litigation. The average duration of suits was seven months and twenty-four days.

The Subordinate Judges and Principal Sudder Ameens decided 631 original suits on merits and 2,004 appeal suits on merits. Of the former 463 were decided in favour of the plaintiff and of the latter 689 in favour of appellant. The number of appealable decrees passed during the year was 631 and the number of appeals 203. The gross value of the suits disposed of during the year was Rs. 10,15,417, of pending cases the gross value was Rs. 11,08,232. The average duration of original suits was one year five months and twenty three days, and of appeal suits one year four months and twenty-five days.

The Civil Judges decided fifty-eight original suits on merits, of which twenty-nine were given in favour of plaintiff, and 1,786 appeal suits, of which 586 were decreed in favour of appellant. There were 611 applications for execution of decree of which only 397 were fully executed. The number of appealable decrees passed in the year was 58 and there were 37 appeals. The gross value of the suits disposed of was Rs. 24,07,462, and the gross value of pending suits was Rs. 83,27,013. The average duration of original suits was one year six months and one day, of appeal suits was one year and seventeen days. These returns exhibit respectively a decrease of five months and fourteen days, and four months and eleven days over the returns of 1855. The accompanying table exhibits the work of the Suddur Udalt:—

The value of the suits disposed of and pending and of the property in litigation with the average duration of suits is shewn as follows : —

	Gross value of Suits.				Average duration of Suits.		
	For 10,000 and upwards.	From 5,000 to 10,000.	From 1,000 to 5,000.	Under 1,000 Rupees.	Disposed of during the year.	Pending at the close of the year.	
In 1855....	5	5	23	103	2,20,601	1,23,812	...
In 1856....	9	3	19	117	2,60,207	10,13,483	...
Increase, ...	4	...	...	14	39,606	8,89,671	...
Decrease, ...	...	2	4	...	...	...	26

The report here contains a statement of the Courts to which suits were remanded, and a table exhibiting the number of appeals remaining undecided on the 1st January, 1857.

There is appended a tabulated statement of the abstract of civil work performed by the several judicial officers during the year.

REPORT ON THE BHOWANIPORE AND THE DULLUNDA ASYLUMS.

Bengal Records, No. XXVIII.

THE reports on the Asylums for insane patients for the years 1856, 1857 were transmitted to Government by the Director General of the Medical Department on the 2nd June, 1858. After passing an encomium on the successful exertions of Dr. Cantor, the Director General suggests that the space now occupied by the European Asylum should be enlarged.

The European Asylum for insanes is at Bhowanipore. It

became the property of Government on the 31st December, 1855. Its site is salubrious and extends over an area of a little more than two acres. The wards are calculated to hold sixty-two patients, but in 1856 on one occasion the number of the patients rose to eighty-two. As the European army in Bengal has so vastly increased in numbers Dr. Cantor thinks that the Asylum should at once be increased. The wards for males give to each single occupant of the 42 rooms an average of a little more than 2,400 cubic feet of air, whilst the average of the rooms of the female wards gives 1,575 cubic feet. "The wards are well raised, and each room is provided with a window out of reach, and with a door half-pannelled, half-grated. In Bengal such construction is preferable to solid doors with inspection plates, which here would obstruct the free circulation of air. Whenever required, the rooms can be darkened by means of a canvas curtain; but they are not lofty enough to admit of punkahs being slung. Each patient is therefore supplied with a palm-leaf fan. The doors are made to open outwards on a common verandah, which being screened by venetians and canvas curtains, offers shelter from the sun and wet. The verandahs during the day also serve as mess and lounging rooms, and are lighted at night. For the wooden bedsteads formerly used in the private Asylum, iron cots of the pattern used in European Hospitals, without hinges, have been substituted, as they combine the double advantage of cleanliness and strength to bear attempts at breakage. They may also, whenever required, easily be fixed to the floor. As a general rule, bed utensils are suffered to remain in the rooms in cases of bodily disease only, as each ward is provided with an easily accessible and airy privy and bathing room, with shower- and-ordinary baths. The floors are stuccoed and either unmat- ted or covered with loose mats, and so constructed as to admit of baths being administered at a moment's notice. In cases of bodily diseases, and during paroxysms of violence, the patients are treated in their own rooms. The absence of effectual means of seclusion, and of padded rooms, is a serious defect in the original construction of the Asylum. A single violent patient is sure to produce a number of imitators, who keep not only their own wards, but the whole Asylum in a state of excitement. Want of space and of accommodation also offers material obstacles to the necessary occupation and recreation of the patients."

The wards for females and the southern ward for males "are provided with yards enclosed by walls, but the other wards all open into the garden, and enable the patients to overlook not only the premises, but part of the public road. This is a serious, and for want of space, irremediable evil. The appearance of a

stranger or a passenger is almost certain to create excitement. A most common hallucination is that of illegal confinement, which vents itself in ineffectual appeals and disappointment, which rarely fail to terminate in paroxysms of fury."

The average cost of the Asylum to Government for 1856 and 1857 was Rs. 41,420-13-6. During the ten years the Asylum was under private management, from 1816 to 1855 the average annual cost to Government was Rs. 42,607-12-11. This saving has not been effected by any decrease in the number of the patients, on the contrary the Government Asylum shows an increase of 38 patients. During the two years the Asylum has been under Government control a saving of more than four thousand rupees has been effected by dieting the patients, through the agency of a private contractor instead of through the Commissariat Department.

There are two scales of dietary, fixed according to the rank in life of the patient. "The first class is composed of Covenanted or Commissioned Officers, gentlemen unconnected with the Public Service, and members of their families. The second class consists of Troops of Her Majesty's and the Honorable Company's Service, and of persons of either sex (Europeans or East Indians,) unconnected with the Public Service."

A small allowance of tobacco is given to such of the patients as may require it and with the best effects.

The following is a general scheme of the dietary:—

" FIRST CLASS TABLE.

Breakfast at 8 or 9 A. M.	{ Eggs, Fish, Steaks, Chops, Cold Meat, Rice, Fruit, Preserves, Tea, Coffee.
Dinner at 1 or 2 P. M. ...	{ Soup, Joints or Poultry, Side-dishes, Vegetables, Pastry, Fruit, Preserves, Sherry, Port, Beer, Lemonade of Lemons or Bael, iced when desired.
Tea and Toast at 6 or 7 o'Clock, A. M. and P. M.	

SECOND CLASS 'FULL DIET.'

According to the Code of Bengal Medical Regulations.

Beef or Mutton, 1 lb.	Pepper, 1 drachm.
Bread, 1 lb.	Ginger, $\frac{1}{2}$ drachm.
Butter, 1 oz.	Nutmeg, $\frac{1}{2}$ drachm.
Tea, $\frac{1}{2}$ oz.	Barley, $\frac{1}{2}$ oz.
Rice, 4 oz.	Flour, $\frac{1}{2}$ oz.
Salt, $\frac{1}{2}$ oz.	Firewood, 4 lb.
Milk, 1 measure.	Vegetables, 1 lb.
Sugar, 1 oz.	Fruit.
Onions, 1 oz.	Lemonade, Toast or Barley-water.

This is a bare standard scale of 'Full Diet,' subject, according to the discretion of the Superintendent, to daily alterations and additions, to please individual fancy. Extra dishes—(Poultry, Pastry and Wine, Beer, Coffee, Ice, &c.,) are inserted in separate Statements as 'Extra Articles,' supplies in excess to the Diet Rolls."

With regard to clothing, those patients who pay wear their ordinary dress, the second class are clothed at the public expense. During paroxysms of destructive violence, the patient is permitted to remain without clothes.

Restraint is in some form or other inseparable from an Asylum, but it is rarely resorted to and never applied to Europeans by the hands of natives. "Instances have occurred at Bhowanipore, in which convalescents who distinctly remembered the paroxysm, have expressed gratification at having escaped the 'shame of being laid hands upon by natives.' A remarkable illustration was offered by a Field Officer, distinguished no less by his services than by his gentlemanly qualities. His intellect had been affected while on leave in a distant Colony, where he had been locked up in a gaol, and subjected to bodily restraint. On admission in the Asylum at Bhowanipore, his expression was wild, and he was inclined to become violent. With an air of defiance he 'surrendered as a prisoner, to be dealt with according to pleasure. If he were not to consider himself as a prisoner,—what else was he?' Why a patient, attention to whose comfort was the sole object of his temporary residence in the place. 'Should he not be locked up and coerced by natives?' Certainly not. His word not to escape was sufficient. After a successful course of treatment, this gentleman repeatedly dwelt with satisfaction upon our first interview. The appeal to his honour, he said, had effectually subdued him, the freedom from mechanical restraint, and of all things, from being coerced by natives, had made a deep impression upon him."

With regard to amusements the climate renders out-door work impossible to Europeans. East Indians disdain all mechanical employment, but copying and writing. They are therefore set to copy, to save paper they use slates. Dr. Cantor suggests that at Bhowanipore there should be spacious halls for religious instruction and for assemblies, lectures and billiards.

The subordinate establishment at present consists of a Matron, Apothecary and Steward and four Overseers, who draw an aggregate of Rs. 520 a month.

The medical records are yet of no value. The report here contains tabular statements of the patients. Intemperance in the majority of instances seems to have been the predisposing cause of madness. The deaths amounted during the two years under review to 13, the number of patients treated was 227 and the number of cured was twenty-six.

The report here contains the post mortem examinations of such patients as died under treatment and the rules of the Asylum.

The Asylum for native insanes was in 1847 removed from

Russapuglah to the Dullunda fields. The site is airy and contains a little more than nine acres. The report contains a plan. "The Asylum for males is composed of four wings, facing a large square court, and stands between a good-sized garden and the open grounds to the southward. Three of the wings contain five separate wards, each ranged along the sides of its own square court. Of the wards three are occupied by Hindoos and one by Mussulmans. The wards are composed of a number of dormitories, each measuring from 5,120 to 11,520 cubic feet. The ventilation is effected by skylights, windows and half-panelled doors. During the daytime, the bedding is kept airing on bamboo stages, purposely erected in the grounds. The floors of the dormitories and verandahs are coated with asphalt, laid on in ripple mark to prevent its becoming slippery. Each dormitory is provided with a closet, in charge of sweepers at all times in attendance. The closets are moreover provided with deodorizing earthen-ware jars, filled with charcoal. The fifth ward is fitted up as a hospital, in which iron-cots and bedding of the pattern used in European Hospitals, have been substituted for wooden cots."

On each side of the large central Court are compartments in which violent patients are at times confined. During the proper seasons the different courts serve as workshops. There is a large tank in the grounds at which either sex bathe on alternate days.

The Asylum for females was not opened until the 10th April, 1857. The report contains a description of the building.

The Dullunda Asylum was originally intended for 150 patients but nearly double that number have been treated since 1855. In 1856, the daily average of patients of both sexes was 282, in 1857, 288. There is great want of accommodation. The power of admitting patients is vested in the Magistrate of the 24-Per-gunnahs. The disbursements on account of the Asylum were for 1856 Rs. 20,888-12-10½ and for 1857 Rs. 21,919-14-8.

The patients are dieted and clothed at a fixed monthly rate of three rupees. They occupy themselves generally in the cultivation and manufacture of jute. The report contains a correspondence on the subject of the employment of the insane patients.

The subordinate establishment including the servants costs Rs. 485-6 a month. There is one European Overseer who receives Rs. 100 a month.

The report here contains the Rules of the Asylum.

The percentage of patients cured in 1856 was 12·83, in 1857 was 15·95. The mortality decreased during the same time from 18·49 per cent. to 17·89. The number of Hindoo patients ad-

mitted was three times that of the Mussulman patients. The chief cause of admission was intemperance.

Dr. Cantor suggests that the grounds should be enlarged, additional wards built, work sheds and store rooms established, the different courts paved, a bathing-house built near the tank, and a dead house established. At present it is impossible to perform post mortem examinations.

THE CALCUTTA COURT OF SMALL CAUSES.

THE report is for the official year 1857-58. The number of cases instituted during the year was 30,843. Of these 13,281 were decided for plaintiffs, 1154 for defendants, 6261 were non-suited and struck out and 10,028 were compromised. The undecided cases postponed after hearing were 154, in 1856-57 they were 160.

In 1856-57 the number of cases disposed of was 28,368. Thus the returns for the year under review show an increase of decided cases of 2,356.

The amount paid into Government for fees was Rs. 1,14,380-5-11 and a further sum was also credited of Rs. 9,720-13-3, for unclaimed monies. Thus the total amount paid into Government was Rs. 1,24,101-3-2. The expense of the Court was Rs. 1,03,264-0-8. Thus there was a balance in favour of the Government of Rs. 20,837-2-6. Of the expenditure of the Court Rs. 42,000 was the amount of the salaries of the Judges and Rs. 61,264-0-8 of the establishment charges. The total amount of fees received during the year amounted to Rs. 1,13,781-6-9, shewing an increase of $11\frac{1}{2}$ per cent. over the receipts of 1856-57.

The following table exhibits the position of the Court in 1857-58 as compared with its position in 1850-51 and 1856-57:—

	First Year 1850-51.	Seventh Year 1856-57.	Eighth Year 1857-58.
Number of cases, { English, { Native, { Total,	4,407	6,254	5,834
Amount litigated,	16,916	22,412	25,009
Commission and Fees paid into Court on institution of Suits,	21,323	28,666	30,843
(Net Amount of Commission and Fees credited to Government on Suits,	4,47,381	0	7,38,111
Net Amount	59,531	6	1,01,464
(Ditto on Distresses for Rent,	57,452	13	1,00,801
credited to Government on account of Fines,	1,510	7	1,000
Government, { Amount credited to Government on account of Fines, { Do. on account of unclaimed monies belonging to Suitors and Landlords, { Do. on account of savings from Salaries, sale of old Furniture, Records, &c. (Net Total Amount credited to Government in the Cash Accounts,	651	6	493
Amount paid into Court under decrees,	207	6	785
" paid out of Court on account of decrees,	59,822	1	1,03,095
Number of days on which the Court was open,	2,46,313	0	1,72,972
Average number of Cases instituted daily,	2,43,604	0	1,70,817
Cases under Rupees 10,	258	246	230
" " 50,	82-6	115-5	123-3
" " 100,	12,791	16,325	17,363
" " 200,	3,363	6,174	6,708
" " 300,	2,422	4,083	4,417
" " 400,	792	1,511	1,619
" " 500,	480	963	932
Number of Summonses issued,	186	331	391
Second Summonses,	86	173	169
Subpoenas, ...	67	161	214
Attachments, ...	51,889	67,687	61,405
Writs of Execution,	0	1,887	1,724
Bench Warrants,	18,952	22,812	22,777
Copies of Judgments,	0	246	418
Commitments, ...	3,918	7,168	8,078
Warrants to sue and defend filed,	0	30	19
Judgments for Plaintiffs, ...	167	184	217
" for Defendants,	448	609	629
Nonsuits, ...	2,176	4,700	5,743
Struck out and Compromised, ...	8,389	12,211	13,281
Undecided (postponed after hearing,)	683	1,022	1,154
	4,172	3,208	3,350
	6,655	11,927	12,939
	333	160	154

EDUCATION IN INDIA.

Parliamentary Papers.

On the 20th October, 1854, the Government of India forwarded to the Court of Directors a despatch from the Chief Commissioner of the Punjaub recording his views on the proposition for extending the North-West Provinces system of vernacular education to the Punjab. The despatch was also accompanied by a minute from Mr. Montgomery and a report from Mr. McLeod on indigenous education. The Supreme Government at the same time transmitted the minutes of its several members.

The despatch by Sir John Lawrence is not included in these Parliamentary Papers

Mr. R. Montgomery, the Judicial Commissioner would, on the whole, introduce an educational scheme in the Punjab. "This scheme the Judicial Commissioner would primarily introduce experimentally into the three most populous divisions—namely, Lahore, Trans-Sutlej States, and Cis-Sutlej States. But from the Cis-Sutlej States the district of Simla might be excluded, as that hilly region is but thinly peopled, and can already boast of an efficient Government school.

"According to the scale sanctioned in the North-Western Provinces, there would be maintained at Government expense, in the divisions under operation, one school with one schoolmaster, and one purgunnah visitor in each tehseeldaree, one zillah visitor in each district, and one visitor-general over the whole. The Judicial Commissioner would fix the salary of the schoolmaster at 15 rupees per mensem; of the purgunnah visitor at 40 rupees; of the zillah visitor at 100; of the visitor-general at 900 (inclusive of travelling allowance); and these salaries are similar to those which prevail under the Agra Government. It would also be very desirable (for reasons to be given hereafter) that four normal schools, costing 150 rupees per mensem each, should be established. There would also be contingencies, such as prizes, books and materials, houseroom, &c. In the Lahore Division, Trans-Sutlej States, and Cis-Sutlej States (exclusive of Simla), there are twelve districts, containing 48 tehseeldars in the aggregate, but as this latter number might fluctuate, it would be safe to give 50."

To introduce completely this scheme into the above districts, the cost would be Rs. 67,800 per annum. The Judicial Commissioner recommends in his minute the grant of this amount, but at the same time proposes that only forty out of the fifty

tehseeldarees should be operated upon. Then the cost would be per annum Rs. 61,200.

The appointment of a visitor general is the corner stone of the scheme and Mr. Montgomery thinks that the post should be given to a covenanted officer. "The first duty of the visitor is to travel about to explain to the villagers the advantages of a school, to offer assistance in regard to procuring schoolmasters, books, &c. but he would be attempting too much if he asked the people to set up a school in every village. He can, however, ask them to set up one school in every circle of the villages or 'hulqua.' He may with the aid of district maps (which are now issuing in abundance from the lithographic press), help them to divide the villages into circles, and to select the most central site for the school."

With regard to the establishment of pergunnah and zillah visitors Mr. Montgomery thinks that competent persons might easily be obtained but he observes "it will be a harder task to fill the humble but useful post of village schoolmaster; and it should be remembered that this office can be performed efficiently only by natives of the Punjab. It is well known that the ignorance and rusticity of the pedagogue almost neutralises the scanty education which does exist. Time will roll away before the demand will, of itself, produce a supply of qualified teachers. Indeed, such a supply would be the much-desired fruit of years of labour on the part of Government. But in the interim a class of schoolmasters must, if possible, be raised up from among the people; some few of the most likely pupils might be selected for this profession from the tehseel schools, but as a rule the *alumni* of these institutions would not reach that standard of homely yet solid acquirement which Government might desire to ensure among village schoolmasters. On the other hand the *élèves* of the academical schools and colleges would be too highly educated and too refined in habits for rustic life. A medium of training must therefore be sought, far more intellectual than that of country schools, and more simple than that of city schools. This can only be gained by means of normal schools; but such schools must not be conducted on too grand a scale; nor must they be too centrally situated, so as to be inaccessible, through distance, to those for whose benefit they are intended. In that case they would become schools of general usefulness, and would cease to serve a special purpose. They must be so arranged as to admit of attendance at moderate cost and trouble on the part of those who, possessed merely of practical intelligence, are content to live among the villages, and earn a livelihood by rustic pedagogy. Mr. Reid attests the want of such establishments in the North-Western Provinces; he has

founded one very good normal school at Agra, but it has not entirely answered expectation, owing to its distance from the homes of the scholars. The Judicial Commissioner would recommend that two such institutions be established in the Lahore Division (one in the Rechna Doab at Sealkote, or Goojranwalla, and one in the Barce Doab at Umritsur); one for the Trans-Sutlej States at Jullundur; and one for the Cis-Sutlej States at Umballa, in all four; fifty pupils would be the full complement of each school. The maximum period of tuition might be three years, and the earlier portion of this term might be probationary; a certificate from the zillah visitor should be necessary to procure admission. Examinations by the visitor should be held on the pupils entering and leaving the school, as well as intermediately. A subsistence allowance of Re. 1-8 per month might be given to each scholar during residence."

The languages to be used in the conveyance of instruction should be Oordoo and Hindec. A central depot should be established for class books, &c. at Lahore. The Judicial Commissioner takes this opportunity to observe that education should be given to the inmates of jails similar to that imparted in the Agra model prison.

With regard to the founding of central schools and collegiate institutions Mr. Montgomery remarks "it should be remembered that a superior class of schools has been established in many of the cities of the Punjab by Missionary Societies. The American Presbyterian Mission have excellent schools at Loodiannah, Umballa, Lahore, Jullundur, and now at Rawulpindee. The Church Missionary Society at Umritsur, Kangra, and Kotgurh (in the Hills). A central school has been founded by the Government at Umritsur. The Judicial Commissioner would not at present propose a similar institution for any other of our cities, except the metropolis of Lahore."

Mr. D. McLeod's educational report was transmitted to the Judicial Commissioner on the 17th December, 1853. The statistical results were then in the Trans-Sutlej Division as follows:—

DISTRICTS.	Population as ascertained or estimated.	Number of Schools.	Number of Scholars.	Annual Emoluments of Masters from all sources, proximately estimated.
Jullunder,	5,67,991	325	3,517	<i>Rupees.</i> 10,000
Hooshiarpoor,	7,49,281	231	2,490	12,000
Kangra,	5,58,915	30	230	2,500
Total,	18,76,187	586	6,237	24,500

Thus about one in three hundred of the population were under education and the emolument of a teacher from all sources was Rs. 42 per annum or Rs. 3-8 a month. In the North-West Provinces the ratio of scholars to population was as one to three hundred and twenty-seven.

Mr. McLeod remarks that there is everywhere in the Punjab a keen desire for education, though the standard has hitherto been low and insignificant. This anxiety however is not of such a character as to afford a prospect of much pecuniary assistance being derived from the people themselves. There is moreover a great dearth of competent teachers and of suitable books. Sanscrit and Arabic are but little studied. The Deva Nagree character is in little use as also is the Goormookhee. In the Trans-Sutlej Division Persian is the most in favour, the study of Oordoo being regarded with a degree of contempt. For English no decided eagerness has been shewn, though were an English class established in any Sudder station it would no doubt be attended, as in the case of the Jullunder Mission School.

There are no girl's schools in the Trans-Sutlej States but the Jat Seikh Zemindars and petty sirdars might be inclined to educate their female relatives. Mr. McLeod mentions that he has frequently "when cases affecting this class have been brought into court, on meeting-with any point of certainty been good-humouredly requested by the sirdar to postpone the inquiry until he could refer to his wife, who was acknowledged to be the household authority in administrative matters; while zemindars coming to court, are not unfrequently accompanied by their wives, who come to look after them, and see that they do not commit any egregious blunders. I gather from hence

that they generally allow somewhat more of discretion to their females than is usual amongst oriental tribes, a characteristic worthy of this fine manly race."

With regard to the objects of education Mr. McLeod remarks that the Indian Government should propose first to raise up suitable candidates for public offices and secondly to raise the intellectual condition of the populations intrusted to their care. Hitherto the select few rather than the great body of the people have been preferred and all our efforts have only raised a body of youths having little in common with their humbler brethren. The Government should therefore take the matter into their own hands and act independently of any spontaneous movement on the part of the people. The instruction conferred should be popular and the oriental languages by no means repudiated. The mental training acquired in the study of these languages renders their students the most apt and intelligent of pupils and causes them to give up much of their inflexibility and assumption of superiority. This is especially the case with Sanscrit pundits, as shown by the school established at Benares. Mr. McLeod cannot conceive how it could be otherwise, how the student could fail to perceive that the nation which has proved itself superior to his own in the arts of war, in mechanical skill and in its administrative power, is also superior in the culture of the intellect, and in moral or physical science. The direct communication of the learned languages should however be confined to the higher seminaries. With regard to the preparation of school books Mr. McLeod would wish to see the statements supporting our views which are to be found in native literature, freely adduced; and he would endeavour to lead the people to understand that our mental and physical sciences are not so much antagonistic to theirs as advanced beyond them.

The report here goes on to shew that the foregoing principles previously urged on the ground of expediency are also consistent with justice.

Mr. McLeod moreover recommends the grant of rent-free lands to village teachers. This suggestion was overruled by the Court of Directors on the ground that these grants would have a tendency to become hereditary, but the Commissioner of the Trans-Sutlej States observes that such liability would not exist if the controlling power were efficient. The outlay proposed to secure such a scheme of education for the Trans-Sutlej States is Rs. 20,000 per annum. The sum would be applied to the maintenance of village schools, town schools, talucae schools and station schools. The pecuniary aid should be given in the form of a grant of land, or through the Lumburdars, the founders of the school, or the most influential

inhabitants, in a half-yearly or yearly payment, with reference to the size of the school and the amount of the grant. For village schools from ten to twenty-five rupees per annum would suffice and from fifty to one hundred for those in towns.

In the village schools Hindee in the Nagree character and accounts should alone be taught. In the town schools Oordoo might be added. In the tehseel schools the masters should comprise teachers of both the current vernaculars and their monthly pay should be from eight to fifteen rupees increased by fees. Persian should be taught and even Arabic and Sanscrit when the masters were competent.

The station schools should be similar in kind but superior in degree to the tehseel schools.

Where efficient Missionary schools are established there Government should retire from the field, and the schools should be endowed with a yearly or half-yearly grant. This course has already been followed in the case of Jainarain's College at Benares, formerly made over by him to the Church Missionary Society.

The Jullundhur mission school should receive a grant of Rs. 500 a year and the Kangra school of Rs. 250. In addition to these district schools a college should be created and in this college English and the learned languages of the east should be taught. This college should be established at Lahore and scholarships should be instituted. Mr. McLeod thinks that Government Boarding Houses should not be established, there should be a visitor general and a divisional visitor, with also visitors to the pergunnah and tehseel schools.

The report closes with remarks on the books to be used and urges the establishment of a local official Gazette.

To the remarks of Mr. D. McLeod are attached four appendices, an extract from a report written on the subject of village schools in the district of Benares in 1849, an abstract of the small rent-free holdings which, in 1854, in the Jullundhur and Hooshiarpore districts, had been released either during the continuance of the object for which they are intended or for the life of the present incumbent; an extract from a report by Dr. James Ballantine, L. L. D. dated 31st July, 1851 and remarks on the establishment of a local official Gazette in the vernacular, in each division of the Punjab, as an adjunct to other endeavours to infuse a spirit of inquiry and intelligence amongst the mass of population.

On the 6th June, 1854 Lord Dalhousie minuted upon the letter and reports by Mr. McLeod and Mr. Montgomery. The Governor General remarks that both are of the deepest interest and high value. But his Lordship thinks there is no reason

why the system proposed by these gentlemen should be limited to their districts. There is no necessity for further experimental measures. The introduction, of tehseldaree schools as the basis of the system may be resolved on at once. A certain number of normal schools should be established and a visitor general should be appointed. But Lord Dalhousie would advise that no limitation as to the class from which he should be drawn should fetter the choice of the local Government. "The best man that can be found likely to devote himself to the duties of the office for a long time to come should be selected by the Chief Commissioner, without any reference to the question whether he be uncovenanted or civilian, whether he wear a red coat or a brown one."

In the minute the institution of a college at Lahore is esteemed, at the present time, to be unnecessary, but this opinion was subsequently changed. With regard to Mr. McLeod's suggestion that where mission schools are already established Government schools should not be set up in opposition but the former should be encouraged by grants-in-aid. Lord Dalhousie observes:—"During my administration here, I have carefully followed the traditional policy which has been handed down to the Government of India for its observance in all matters into which there enters a religious element. But I am of opinion, that for these days we carry the principle of neutrality too far; that, even in a political point of view, we err in ignoring so completely as we do the agency of ministers of our own true faith in extending education among the people; and that the time has now come when grants of money in aid of secular education, carried on in schools established and conducted by Christian missionaries, might be made by the Government without any risk of giving rise to those evils which a recognition of such agency has hitherto been thought likely to create, and with the certainty of producing an immense and an immediate effect in the extension of sound secular education throughout the masses of the population in India."

The funds to be spent upon education in the Panjaub the Governor General thinks should not exceed a lakh of rupees a year. "The sum may be large in itself, but it is a very trifle in relation to the object to be gained by it, and in comparison with the rich results it will one day produce."

"If India were poor, and were every day becoming poorer, it would still be our duty and our interest to incur this charge. But India is rich, and is every year becoming richer, wherefore I feel confident that the Honourable Court will not hesitate for a moment in giving its sanction to the charge which is necessary for the establishment of an effective system of vernacular education throughout the Panjaub."

Messrs. Dorin, Low and Grant agreed in the foregoing minute of the Governor General. But the latter observes on the remarks of Lord Dalhousie on the suggestion by Mr. McLeod "to support missionary schools by public money where they impart a good secular education, and to increase the efficiency of such schools by grants in aid." "The Governor-General admits that this proposal is in violation of the traditional policy handed down to the Government of India for its observance in all matters into which there enters a religious element. Now, the originators of this traditional policy were the founders of no less a work than the British empire in India; and of all the parts of the work they founded, that in which their success has been most striking is that in which the religious element is concerned. This proposal was also in violation of an unbroken chain of express orders issued by a long succession of Home Governments.

"Taking the principle of making grants in aid to institutions of all sorts affording secular education as determined, it still remains to be determined how the principle is to be carried into execution.

"I believe that it will be found a matter of infinite difficulty for the Indian Governments so to distribute and regulate grants in aid to mission schools as not to offend, even in appearance (and here the appearance of the thing is of the essence of the political question), against the still recognised principle of religious neutrality; for one of the acknowledged objects, and the greatest object, of mission schools is proselytism. If private persons spend their own money in endeavouring by legitimate means to convert people of other religious persuasions to their own religious persuasions, the people of India are not so intolerant as to question the right of such persons so to spend their money, or so bigoted as to take offence at their doing so. In this way, quietly, safely, and surely, much good has been done, and much good is now doing, by private benevolence. And in this way, if no error of policy be committed which shall change the course of native feeling on the subject, there seems to me reason to expect that, under Providence, the good that may eventually be done quietly, safely, and surely, will be infinite. But the case would be different if the public taxes which are paid by, and are held in trust for the use of the people of India, were, or were believed by the people of India to be, appropriated in aid of such endeavours at conversion. We have only to imagine the same policy adopted at home, to become sensible of what the feelings of Mahomedans and Hindoos under such policy would be in India. How, for example, would the Scotch feel, and how would they be likely to act, if Scotch taxes were spent upon pro-

paganda missions in Scotland? I am firmly persuaded that unless in practice it be so contrived that all breach, and all appearance of breach, of religious neutrality can be avoided, a blow will be struck at our power in India, which in the course of time may prove fatal.

"So many dangers and evils seem to threaten us, on our abandonment of the known and plain course of absolute disconnection with all proselytising institutions, that I trust that those even who think that such abandonment is proper, will admit that we must walk with infinite caution in the untried and difficult path we are about to enter."

On the 30th December, 1854, Lord Dalhousie submits to the Council "the measures which seem best calculated to give effect to the Honourable Court's views regarding education in India" as conveyed in their despatch of the 19th July, 1854. That despatch divides its subject under three principal heads:—

"1. Machinery for managing the Department.

"2. Establishment of Universities.

"3. Grants-in-aid."

With regard to the first of these the Court have authorised the Governments of Madras and Bombay to make provisional arrangements, and the despatch leaves the Governor General in Council to take similar measures for Bengal, Agra, and the Non-regulation Provinces. The Governments of Bengal and the North-Western Provinces should be instructed to appoint a head of the department on a salary not exceeding 3,000 rupees a month. A limit of four Inspectors should also be laid down for Bengal, and the Non-regulation Provinces on salaries varying from Rs. 500 to Rs. 1,500 a month, and of two such Inspectors for the North-Western Provinces on salaries of Rs. 800 to Rs. 1,200 a month. A separate officer should be appointed for the superintendence of education in the Punjab, and Inspectors should also be nominated. The other Non-regulation Provinces, Mysore, Pegu, Nagpore, and the assigned districts of Hyderabad, the Governor General remarked, "are generally such recent acquisitions, that the administration has hardly as yet been sufficiently organised to admit of an educational department being created within them." The Commissioners of Pegu and Nagpore, and the Resident at Hyderabad should, however, be immediately consulted as to the steps which they would recommend the Government to take respecting education within their several jurisdictions. Mysore would probably be most conveniently managed in educational matters as a part of the system which may be established at Madras; the functionary, by whom the system shall be executed in Mysore, corresponding

direct with the Supreme Government. Upon this point the Commissioner of Mysore should be consulted.

“The Government of the Straits Settlements will also require that some provision should be made for it. Those settlements are so inconsiderable in territorial extent, that it is doubtful to my mind whether a separate officer, solely for the superintendence of education, can be required within them. A reference should at once be made to the Straits Government upon this head.”

The Government of Bombay had not at this time submitted any scheme, but Lord Dalhousie apprehended that the measure proposed for Bengal, and for the North-Western Provinces would be perfectly applicable to Bombay.

The Government of Madras submitted a scheme of its own. The scheme is contained in this selection. It proposed, “‘not as the permanent establishment,’ but only as the agency, which will be ‘necessary for initiating their proceedings,’ the appointment of a Secretary to Government in the Educational Department on a salary of 3,333 rupees per mensem; of an Under-Secretary for the same department on 1,350 rupees per mensem; of six Inspectors, on 1,200 rupees per mensem each, and other minor officers.” This establishment the Governor General thought unduly extensive and unnecessarily costly.

With regard to that portion of the despatch of the Court of Directors on the creation of Universities Lord Dalhousie conceives that “the members of the Council of Education, relieved from their present duties, together with the other gentlemen whom the Government may propose to associate with them in the future *Senatus*, may be requested to apply themselves to the consideration of the rules and regulations which will be required for the governance of the university hereafter.”

The next branch of the despatch of the Honorable Court refers to grants in aid. These grants are stated to be “(1) based on entire non-interference as to the religious instruction conveyed in the schools assisted. (2). They are to be given, so far as the requirements of districts and the funds at disposal permit, to all schools which give a good secular education and are under permanent local management. (3). They are to be given to no schools which do not require from their pupils a fee for tuition, except normal schools. (4). They are to be given for specific objects in preference to simple pecuniary grants for general expenses. The specific objects are stated to be augmentation of salaries of head teachers, supply of junior teachers, foundation or part foundation of scholarships, erecting or part erecting or repairing a school-house, or provision of books.”

To those conditions it should be added that the grants-in-aid

in no case exceed in amount the sum expended on the school by private persons or bodies. Lord Dalhousie thinks that the aggregate annual amount of the grants having been fixed the expenditure should be left in the hands of the local Government. The expenditure upon grants in aid should be five per cent. upon the annual educational expenditure. Messrs. Dorin, Grant, Peacock and General Low agree in the remarks of the Governor General.

The republished parliamentary papers here contain the scheme for the establishment of universities in the presidency towns of Calcutta, Madras and Bombay. This scheme has already been analysed in Part II. of these Annals.

The collection of papers concludes with the acts to establish and incorporate universities in Calcutta, Madras and Bombay.

The views of the Governor General on the educational despatch of the Court of Directors were in 1855, conveyed to the Governments of Bengal, North-Western Provinces, Fort St. George and the Punjab. At the same time the Governor of the Straits Settlements, the Commissioner of Nagpore, the Commissioner of Mysore, Major A. P. Phayre, Pegu, Lieutenant Colonel Sir A. Bogle, Knt., Tenasserim and Martaban Provinces and the Resident of Hyderabad were requested to report what steps they would recommend the Government to take with a view to the diffusion of education among all classes within their several provinces. Their recommendations are not contained in the correspondence here analysed.

The rules finally adopted by the Supreme Council for the regulation of grants-in-aid were as follows:—"These grants will be made with a special view to the extension and improvement of the secular education of the people, and will be given impartially to all schools, whether male or female, Anglo-vernacular or vernacular (so far as the requirements of each particular district, as compared with others, and the funds at the disposal of Government, may render it desirable), which impart a sound secular education, and the managers of which may consent to submit to the conditions mentioned below. It will be essential to the consideration of applications for aid, that the schools on behalf of which they are preferred should be under the management of one or more persons who, in the capacity of proprietors, patrons, trustees, or members of a committee elected by the society or association by which the school may have been founded, will be prepared to undertake the general superintendence of the school, and to be answerable for its permanence for some given time.

"No grants will exceed the amount of funds raised from local or other sources for the purposes for which the grant is sought; and, as a general principle, except in the case of normal

schools for training teachers, grants will be made only for specific purposes, and not in the form of simple contributions in aid of the general expenses of a school.

"Except in the case of normal schools for training teachers, grants will be restricted to those schools in which some fee, however small, is exacted from the scholars.

"All applications for grants must be accompanied by a declaration that the applicants are prepared to subject the school, on behalf of which the application is made, to the inspection of a Government Inspector, such inspection and examination having no reference to religious instruction, but only to secular education. The applicants must further declare their willingness to conform to the conditions hereunder specified for the regulation of such grants, and no grant will be made until it shall have been ascertained from the report of an Inspector—

"1st. That the case is deserving of assistance.

"2d. That the grant applied for will not supersede the efforts of associations or individuals.

"The following are the specific objects for which grants will be given :—

"1st. The erection, enlargement, or repair of school buildings.

"2d. The provision of school furniture.

"3d. The augmentation of the salaries of the teachers, or provision of additional teachers.

"4th. The provision of stipends for pupil teachers, and of gratuities to teachers who undertake to instruct them.

"5th. The provision of school books, maps, and school apparatus at reduced prices, according to the circumstances of the case.

"The following are the conditions upon which grants will be made for the objects above specified :—

"1st. It will be a condition of all grants towards the erection, enlargement, or repair of school buildings, that such rules as shall be laid down in regard to the dimensions and arrangements of the school buildings, with reference to the number of scholars they are designed to accommodate, shall be duly observed, and that the permanent assignment of the buildings for school purposes shall be adequately secured.

"2d. Applications for grants for the provision of school furniture must be accompanied by a declaration on the part of the applicants that they will be personally responsible for the due preservation of the furniture of the school, and for its being reserved for the purposes for which it is supplied.

"3d. Application for grants in augmentation of the salaries of teachers, or for providing additional teachers, like other

applications for aid, will be referred to a Government Inspector for report on the merits of the school and qualifications of the teachers, and their continuance will depend upon the periodical reports of the Inspector on the merits and proficiency of the teachers as ascertained at his periodical examinations of the school.

"4th. Grants for the payment of stipends to pupil teachers will be made only to those schools in regard to which the inspector may report that the master is competent to instruct such pupil teachers; and the continuance of such stipends, as well as the amount of gratuities to be assigned to the masters for the instruction of the pupil teachers, will depend upon the proficiency of the latter.

"5th. Grants of school books, maps, or apparatus at reduced prices will be accompanied by the condition that the books shall be appropriated *bond fide* to the use of the masters and scholars, and that due means shall be taken for their preservation.

"Grants will also be given in aid of scholarships and of stipends for normal students, the rules for which will be notified hereafter.

"No payments will be made by Government until the proportion of funds which, under the conditions of the grant, is to be contributed from local or other sources, shall have been actually paid.

"It is to be distinctly understood that grants in aid will be awarded only on the principle of perfect religious neutrality, and that no preference will be given to any school on the ground that any particular religious doctrines are taught or not taught therein."

On the 13th August, 1855, the Government of India informed the Court of Directors, that the specific sum for grants in aid was fixed at 25,000 rupees and the other expenses of the department were estimated at Rs. 2,20,000 a year.

On the 29th January, 1856, the Government of India informed the Hon'ble Court of Directors that they had provisionally sanctioned the establishment of 60 circles of schools, 20 in the 24-Pergunnahs, 20 in Jessore and 20 in Dacca at a maximum aggregate cost of Rs. 1,500 a month as suggested by Mr. Woodrow. The Court of Directors subsequently approved of this scheme. In the same year scholarships tenable by pupils in zillah and normal schools in Bengal at an eventual expense of eight hundred rupees per annum were sanctioned, and the Bengal Government were to grant sums in aid of educational institutions at an amount equal to ten per cent. upon the annual educational expenditure in that Presidency.

On the 18th May, 1855, the Court of Directors expressed their readiness to sanction an expenditure of eight lakhs of rupees on the construction of a suitable building for the Presidency College. Colonel Goodwin estimated the cost of the erection of such a building at twenty lakhs. On the 3rd of June, 1856, Lord Canning minuted on the extravagance of such an estimate and notified on the 29th August, 1856, that he had appointed a committee to determine on the least amount of space required and to submit a design for a building in accordance therewith. Mr. Grant minutes on the same subject as follows:—“I cannot think the objections now raised by the Director of Public Instruction to the scheme of a Presidency College otherwise than very much out of time and place. That scheme was not an immature and hasty project. It was carefully discussed and deliberately recommended by the late Council of Education, whose long-considered and unanimous opinion would not be less worthy of attention than that of Mr. Young, even if it stood alone. But having been backed by the cordial support of successive Governments of Bengal and India; having met with the unqualified approval of the Home Government, who have ordered its institution; and having been now, under such auspices, actually instituted, it seems to me that the Presidency College ought not to stand still because of the doubts of an individual educationist.

“The notion that private enterprise and charity in India will shortly be able to establish at the capital such an institution as the London University, after having filled to overflowing all those channels in the provinces through which, by humbler but most useful means, the educational wants of a hundred millions of people must be supplied, is surely a baseless imagination. As if in mockery of such dreams, the very box which brought round Mr. Young’s prognostication on this point, contained another despatch from the same gentleman, with the earnest solicitation of the committee of a little and very cheap School of Arts, established a year or two ago in Calcutta, that government would be pleased to adopt and take entirely over to itself this useful little establishment, because, although it had not been unsuccessful in its object, and was largely assisted by a grant in aid from the State, its means from private enterprise and charity were already dwindling away.

“I wish Mr. Young, instead of himself obstructing the progress of the college by the needless questioning of a measure that has been determined upon by authority higher than any in India, had in the exercise of his own proper functions prevented the obstruction which with different motives has been caused by the absurdly extravagant demands for space which

have been made and attended to. Who authorised Colonel Goodwyn to waste his own time and the time of his establishment in making detailed plans and estimates for an edifice called an anatomical department, considerably larger than the college hospital; and for another edifice upon an immense scale, to be called a chemical department? As the Governor-General has stated, no such buildings were ever authorised by the Government of India, and no such extravagances were ever contemplated by this Government. The eight lacs plan provided ample room for a medical museum and a chemical laboratory. It provided also ample space for a geological museum and a library; a great hall, theatres, and class-rooms; professors' private rooms, and apartments for the resident medical pupils; upon what Dr. Mouat, who knows more of the wants both of the medical and general branches of the college than any one else is likely to know, believed to be a most liberal estimate.

"It is strange to find Mr. Young, after the plan has been blown out from eight to 20 lacs, mainly by accepting the extravagant claims of the medical college branch for space, using the cost of such extravagant provision as an argument, not for reducing the provision within reasonable limits, to do which was in his peculiar province, but for building no college at all; whilst in the very same letter he tells us that it is the general opinion of the medical professors that a lac of rupees, or thereabouts, would improve and enlarge the buildings of the old medical college, so as to suffice for all probable requirements for several years to come. What those buildings are, and how much money has already been wasted in patching them, we all know."

On the 26th August, 1856 the Supreme Government observed in a letter to the Court of Directors with regard to education in the North-West Provinces. "Your Honourable Court will perceive that, in addition to the sum of 62,908 rupees per annum that has already been sanctioned for this purpose, we have now authorised the annual expenditure of 56,448 rupees, on the following accounts:—

"1st. For the completion of the first circle of superintendence, by the extension of the system to Hissar, Paneeput, Bijnore, and the Dehra Dhoon, at an expense of 13,232 rupees a year.

"2d. For the establishment of an independent circle of superintendence in the province of Kumaon, at an annual expense of 9,552 rupees; and

"3d. For the extension of the system to the Saugor and Nerbudda Territories (including Scindia's district of Chundeyree under our management), at an annual cost of 33,664 rupees.

"We have authorised the Honourable the Lieutenant-Gover-

nor to endeavour to procure the consent of the Gwalior durbar to bear the expense of vernacular schools in Chundeyree, and in certain pergunnahs in Saugor and Hoshungabad ; as also a proportionate share of the Inspector's salary and expenses.

" With reference to the Lieutenant-Governor's proposal to appoint the Rev. Mr. Buddew, a missionary at Almorah, to be Inspector of schools in Kumaon and Gurhwal, we have requested his Honor to make some other arrangement for the supervision of the schools in those districts pending the receipt of a reply from your Honourable Court to our letter, No. 8 of 1856, dated the 19th February." The Court objected to the appointment of Mr. Buddew.

With regard to education in the Madras Presidency the establishment for which sanction had in 1856 been requested were as follows : —

				Per Mensem.
Superintending establishment,			<i>Rs.</i>	13,335 0 0
Presidency College, ... ..			...	4,956 8 0
Normal school, ... ..			...	2,251 8 0
Provincial and zillah schools, ... ..			...	9,542 0 0
Talook schools, ... ..			...	3,700 0 0
Book depository, .. ..			...	130 0 0
Printing presses, ... ..			...	310 0 0
Scholarships, .. ..			...	1,000 0 0
				35,225 0 0
				12
Per Annum,			<i>Rs.</i>	4,22,700 0 0

The Government of India sanctioned all the proposed establishment except the salaries of the Inspectors which were modified and the "application for Assistant Inspectors" which was rejected. These facts are given in a public letter from Fort St. George, dated the 11th February, 1856 with which also was forwarded a report from Mr. A. J. Arbuthnot on the existing means of training persons for employment in the Public Works Department. The Court of Directors had suggested that a civil engineering college should be established. Mr. Arbuthnot thinks that such an establishment should not be founded on the basis of any such existing institutions as Major Maitland's school. The plan submitted by Mr. Arbuthnot is a modification of that sketched out by the Commissioners of Public works and the monthly expenditure is estimated at Rs. 4,856. The recommendations of Mr. Arbuthnot met with entire approval and the cost was esteemed moderate.

Pending orders from the Court of Directors the Government of Madras appointed the Rev. John Richards, a gentleman peculiarly qualified for the office, to the office of Inspector of schools. The Court of Directors decided that Mr. Richards, then a chaplain in the Company's service should make his election between his appointment as Inspector of schools and chaplain. At the same time the Court observed "we wish you to bear in mind that we already have discouraged and deem it undesirable to appoint the ministers of any religious persuasion as Inspectors of schools."

The rest of the correspondence relates merely to the remodeling of the Madras normal school. With regard to normal schools generally the Court of Directors in a despatch, dated 11th March, 1857, lay down in a letter, dated the 11th March, 1857, the following rules :—" We are not of opinion that there is nothing in the constitution of the Training School which places it beyond the scope of the grant-in-aid system. Grants are made to ordinary schools in consideration of the means of a good secular education which they afford, and without any reference to the religious faith of the managers. In the same way, and as a means of increasing the efficiency of such ordinary schools, assistance may be extended to training schools, by whomsoever conducted, when they appear to be established on a secure basis, and to carry out their objects in an efficient manner. In this view a grant could not be refused to the Madras Training Institution, merely because its design was the raising up of teachers for Christian schools; and we may add that, in the present great demand for teachers for schools of all descriptions in your Presidency, we do not consider it a sufficient reason for refusing aid to a training school, under private management, that Government would not thereby be relieved from the necessity of establishing a separate normal institution at the cost of the State."

The correspondence contains little or nothing as to the state of education in the Bombay Presidency. The opinions of the Bombay Council on the establishment of a University we have already summarised.

THE ABKARRY ADMINISTRATION OF THE LOWER PROVINCES.

For the year 1856-57.

THIS report was submitted by the Junior Secretary to the Board of Revenue, Lower Provinces, on the 5th March, 1858.

The statement of the Chota Nagpore Division is appended to the statement.

Patna Division.—"The Hal demand in the districts of this Division, including Tirhoot, was Rupees 9,37,604, or Rupees 20,742 in excess of that of the preceding year, the increase being almost exclusively in the Patna and Behar districts. The whole of the Bukya demand of Rupees 21,856 was realized, with the exception of Rupees 974 remitted in Behar. The net increase of revenue, as compared with 1855-56, is Rupees 26,638, of which Rupees 13,338 is owing to the increased collections in Patna and Behar, and Rupees 6,362 to reduced charges in the same districts."

Bhaugulpore Division.—"The returns from the Bhaugulpore Division show a decrease of Rupees 8,082 in Bhaugulpore and Purneah, and an increase of Rupees 2,176 in Monghyr."

The net revenue amounted to Rs. 2,81,579. The decrease in the Purneah division arose from the failure of the crops.

Rajshahye Division.—In this Division the whole of the demand Rs. 1,37,801 but Rs. 711 was realized. The increase over the returns of 1855-56 was Rs. 8878.

Dacca Division.—"The results in this Division are satisfactory, there being a net increase of Rupees 10,440, and no balance outstanding, except a trifling one of Rupees 178 in Furreedpore, which was realized after the close of the year." The realised revenue amounted to Rs. 2,08,868.

Chittagong Division.—In this Division there was a net increase of Rs. 6,912, the whole sum realised was Rs. 52,992.

Nuddlea Division.—The revenue realised in this Division amounted to Rs. 8,70,545. Thus there was an increase in the sum realised during the year, as compared with 1855-56, of Rs. 16,635.

Burdwan Division.—"There is an increase of net revenue in all the districts of this Division, amounting to Rupees 22,759, of which Rupees 10,379 belongs to Zillah Hooghly, where the Abkarry Mehal was ably managed by Mr. Deputy Collector Hampton, of whom the Commissioner says he cannot speak too highly. The increase in the other districts, though not so large, is also satisfactory. The large balance of Rupees 3,650 remitted in Beerbhoom, accrued during the Sonthal rebellion, and was written off by order of Government." The net revenue was Rs. 2,82,971.

Cuttack Division.—There was a net increase of Rs. 6079. The sum realised was 83,742.

Assam.—"The returns from this Division show a net increase in the revenue of Rupees 24,177, owing almost exclusively to in-

creased sales of Abkarry Opium, consequent on the decrease in the indigenous Poppy crop." The net revenue was 87,758.

Darjeeling.—The abkarry revenue was 3,152, exhibiting a net increase of Rs. 358.

Arracan—The whole net revenue was Rs. 74,257, of which Rs. 59,448 was realised in Akyab. The net increase was Rs. 16,554.

Thus on the whole the net Abkarree revenue of the Lower Provinces in the year under review was Rs. 30,32,716. There was therefore a net increase of Rs. 1,50,185.

The abkarry statement of the Chota Nagpore Division is appended to the report. The sum realised was Rs. 51,10,613, against Rs. 1,07,065 in 1855-56. The sum demanded was Rs. 1,51,217. The revenue of Hazareebaugh was nearly doubled during the year. The statement shewing the number of persons arrested, convicted and imprisoned under the excise laws during 1856-57, is very imperfect and therefore in this summary useless.

EAST INDIA REVENUES.

Parliamentary Papers.

A PARLIAMENTARY paper dated 20th April, 1858, contains an account of all the revenues and charges of India. From this it appears that the gross revenue from all sources of British India was in pounds sterling (at the rate of 1s. 10½d. the Company's Rupee.)

1850-51,	...	...	...	...	£24,767,283
1851-52,	...	...	...	...	25,300,737
1852-53,	..	...	...	...	26,053,759
1853-54,	...	...	...	...	25,575,246
1854-55,	...	...	...	...	26,424,141
1855-56,	...	...	...	...	27,912,266
1857-58,	...	...	...	..	28,334,395

The net revenue after deducting the charges of collection, and the pensions and other grants, including advances for manufacture was during the same periods:—

1850-51,	...	...	..	...	£18,844,551
1851-52,	...	...	..	...	19,242,518
1852-53,	...	...	...	...	19,772,491
1853-54,	..	...	...	...	19,073,203
1854-55,	...	...	...	...	19,779,163
1855-56,	...	...	...	...	21,440,239
1856-57,	..	...	..	...	21,196,891

The total net charges upon the revenues, that is charges on all departments after deducting receipts of those departments were :—

1850-51,	...	..	..	...	£18,429,108
1851-52,	...	...	..	...	18,711,253
1852-53,	...	...	...	..	19,318,234
1853-54,	...	...	..	...	21,117,320
1854-55,	..	...	...	...	21,486,527
1855-56,	...	..	..	...	22,413,030
1856-57,	...	...	...	..	22,031,721

In 1856-57 the heads of revenue produced as follows :—

	<i>Gross Revenue.</i>	<i>Charges.</i>	<i>Net Revenue.</i>
Land, Sayer, Abkarrec & Peishcush,	£18,945,025	£4,627,220	£14,317,805
Customs, ...	2,071,196	110,072	1,961,124
Salt, ..	2,387,651	554,240	1,833,411
Opium, ..	4,637,442	1,460,200	3,177,242
Stamps, ..	565,219	36,926	528,293
Mint receipts, ...	234,364	76,946	157,418
Unclaimed estates,	3,071	0	3,071
			<hr/> 28,334,395
Deduct charges,			<hr/> 7,137,501

Total Net Revenue, 21,196,894

The charges for the same year 1856-57, were—

	<i>Gross.</i>	<i>Deduct Receipts.</i>	<i>Net.</i>
Post Office, ...	£256,759	£163,771	£92,988
Civil and Political,	3,607,906	319,087	3,288,819
Judicial and Police,	2,661,981	189,645	2,472,336
Marine, ...	630,687	162,493	468,194
Military and War, ..	10,945,224	0	10,945,224
Debt, ...	2,155,301	0	2,155,301
	<hr/> 20,257,858	<hr/> 834,996	<hr/> 19,422,862
Totals, ..			30,707
Add Straits Charges,	...	...	...
Territorial payments in England, ..	...	...	2,623,744
Govt. Stores exported to India, ...	...	...	915,822
			<hr/> 22,981,721
Deduct total charges,			21,978,864
Total Net Produce, ..			<hr/> 9,53,857
Deficit,			

A minute account of the revenues and charges follows which cannot be condensed further than above. It is stated however under the military expenditure that Her Majesty's troops cost for pay, allowances, commissariat and contingent charges.

Bengal,	£773,318
Madras,	96,266
Bombay,	233,979
Sind,	1,675

1,102,168*

On 30th April, 1856, the amount of debt charged on the revenues of India was:—

Registered Debt,	£44,028,592
Treasury Notes,	967,711
Temporary Loans,	219,656
Deposits,	5,267,410

Total,	50,483,369
Bond debt,	3,894,400

Total,	54,377,769
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The amount of the security fund of the stock of the East India Company was on 12th April, 1858, £4,037,429. The balances in the Indian Treasuries were:—

1850,	£11,656,157
1851,	11,837,905
1852,	13,670,697
1853,	14,427,314
1854,	13,188,244
1855,	9,534,235
1856,	12,043,334
1857,	12,727,464

The cash balance at home was on 30th April:—

1851,	£3,753,052
1852,	3,417,942
1853,	3,246,316
1854,	3,305,937
1855,	5,688,635
1856,	4,392,998
1857,	4,203,709

Another Parliamentary Paper dated 9th April, 1858, contains all the notifications inviting loans issued between 1834 and 1857. They are summarised in the following table:—

* There must be items excluded from this account. There were thirty Regiments in India, and according to the returns presented in 1853, a European Regiment costs £55,000.

ACCOUNTS of the PUBLIC DEBT of India, as it stood on the 1st May, 1834, and at the date of the last Accounts received; showing separately the Amount of each LOAN, and the Rate of Interest borne by the same; and of all Sums received, and of all Sums paid off in respect of such Loans; and also of all Sums transferred from one Loan to another, during the Period above referred to, converted into Sterling Money, at the fixed rate of 1s. 10½d. per Company's Rupee.

	Amount of Debt on the 1st May, 1834.	Rate of Interest.	Debts subsequent to 1st May, 1834.	Rate of Interest.	Amount Paid off.		Amount subject to Discharge, not claimed, Interest-bearing.	Amount of Debt on the 1st May, 1834.
					By Cash.	By Transfers to other Loans.		
Loan transferred from Fort Marlborough, ...	£. 1,851	10 per cent.	£.		1,136	£.	£.	715
Madras Permanent Loan, ...	14,437	8 per cent.	...		...	...	...	14,437
Remittable Debt, 30th June, 1822, ...	7,474,210	6 per cent.	...		4,401,256	3,072,954	...	3,38,178
Loan from the King of Oude, ...	563,909	"	...		225,731	...	...	...
Stipend Fund of the Bhov Begum, ...	607,927	"	...		153,936	453,991	...	...
Madras Notes under Advertisement, 1st May, 1811, ...	85,018	"	...		85,018	...	...	...
" Permanent Loan, ...	10,137	"	...		2,590	...	...	7,547
Loan of the 31st March, 1823, ...	4,691,920	5 per cent.	...		2,450,508	2,237,494	3,918	...
" of 1825-26, ...	7,840,080	"	...		2,347,857	7,138,114	36,414	...
" of 1829-30, ...	1,697,680	"	...		22,500	368,965	15,375	...
" from the King of Oude, ...	1,553,965	"	...		24,015	...	...	1,162,500
" from individuals, ...	28,515	"	...		1,627	...	...	4,500
" from Mabaruck Ool Nissa Begum, ...	1,627	4 per cent.	...		...	13,830	...	...
" of 1824-25, ...	123,110	"	...		...	...	...	109,280

A third paper gives the liabilities of the East India Company in the nature of guaranteed interest to Railways, and on funds, &c. The total on Railways is:—

At 4½ per cent.,	...	...	...	...	£833,235
At 4¼ per cent.,	...	...	...	...	905,985
At 5 per cent.,	...	...	...	...	14,234,364
Total on Railways,	...	...	...	...	16,073,584

The liabilities for funds amounted in 1855-56, to Rs. 18,05,316. The amount bestowed in charitable subscriptions was Rs. 1,13,760.

Note.—A paper presented by Mr. Hendriks to the Statistical Society contains the statistical history of the Indian revenue from all sources between 1792 and 1852 a period of sixty years. The annexed tables summarise the facts:—

Branches of Revenue.	Five Years, 1792-3 to 1796-7.		Five Years, 1797-8 to 1801-2.		Five Years, 1802-3 to 1806-7.	
	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.
	Mlrs. £	Per Cent.	Mlrs. £	Per Cent.	Mlrs. £	Per Cent.
1. Land,	4·068	50·33	4·126	42·02	4·582	31·99
5. Salt,	1·207	14·93	1·188	12·10	1·589	11·09
6. Opium, ...	0·264	3·27	0·312	3·18	0·579	4·04
7. Post Office,	0·028	·35	0·042	·43	0·048	·34
8. Stamps, ..	...	...	0·030	·30	0·062	·43
9. Customs, ...	0·192	2·38	0·304	3·10	0·596	4·16
10. Mint,	0·008	·10	0·008	·08	0·012	·08
12. Miscellaneous,	2·315	28·64	3·809	38·79	6·857	47·37
Total Avg. Revenue,	8·082	100·	9·819	100·	14·325	100·
„ Avg. Charges, ...	6·900	85·4	10·197	103·8	15·554	108·6
Average Indian Surplus,	1·182	...	...	...	...	...
„ Indian Deficiency, ...	...	...	·378	...	1·229	...

Branches of Revenue.	Five Years, 1807-8 to 1811-12.		Five Years, 1812-13 to 1816-17.		Five Years, 1817-18 to 1821-2.	
	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.
	Mlns. £.	Per Cent.	Mlns. £.	Per Cent.	Mlns. £.	per Cent.
1. Land, ...	5·078	31·68	9·018	52·33	13·263	66·17
5. Salt, ...	1·785	11·14	1·882	10·92	2·256	11·25
6. Opium, ...	0·767	4·79	0·958	5·56	1·090	5·44
7. Post Office, ...	0·058	·36	0·071	·42	0·085	·42
8. Stamps, ...	0·067	·42	0·122	·72	0·234	1·17
9. Customs, ..	0·807	5·04	1·159	6·68	1·667	8·32
10. Mint, ...	0·013	·08	0·035	·21	0·057	·29
12. Miscellaneous, ...	7·452	46·49	3·990	23·16	1·392	6·94
Total Avg. Revenue,	16·027	100·	17·235	100·	20·044	100·
„ Avg. Charges,	14·782	92·4	15·490	89·9	19·609	97·8
Avg. Indian Surplus,...	1·245	...	1·745	..	·435	...

	Five Years, 1822-3 to 1826-7.		Five Years, 1827-8 to 1831-2.		Five Years, 1832-3 to 1836-7.	
1. Land, ...	13·567	61·83	13·112	60·90	11·942	57·00
2. Sayer, ...	...	...	...	...	0·149	·73
3. Excise, ...	...	...	...	...	0·004	·02
4. Moturpha, ...	...	...	...	...	0·019	·09
5. Salt, ...	2·603	11·87	2·590	12·03	2·036	9·72
6. Opium, ...	1·641	7·47	1·747	8·12	1·677	8·00
7. Post Office, ...	0·118	·54	0·124	·58	0·120	·57
8. Stamps, ...	0·329	1·50	0·381	1·77	0·356	1·70
9. Customs, ...	1·663	7·58	1·747	8·12	1·506	7·19
10. Mint, ...	0·035	·16	0·037	·17	0·066	·31
11. Tobacco, ...	...	...	...	...	0·015	·07
12. Miscellaneous, ...	1·986	9·05	1·789	8·31	3·059	14·60
Total Avg. Revenue,	21·942	100·	21·527	100·	20·949	100·
„ Avg. Charges,	22·184	101·1	20·724	96·3	16·896	80·7
Avg. Indian Surplus,	...	...	·803	...	4·053	...
„ Indian Defi- ciency, ...	·242	...	...	...	...	...

Branches of Revenue.	Five years, 1837-8 to 1841-2.		Five Years, 1842-3 to 1846-7.		Five Years, 1847-8 to 1851-2.	
	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Average Annual Revenue.	Ratio of each Branch to Total Revenue.
	Mlms. £.	Per Cent.	Mlms. £.	Per cent.	Mlms. £.	Per Cent.
1. Land, ...	12·380	59·05	13·432	55·85	14·947	56·06
2. Sayer, ...	0·725	3·46	0·824	3·43	1·038	3·89
3. Excise, ...	0·023	·11	0·028	·12	0·028	·10
4. Moturpha, ...	0·103	·49	0·112	·47	0·116	·43
5. Salt, ...	2·593	12·37	2·798	11·65	2·438	9·14
6. Opium, ...	1·547	7·38	2·965	12·33	3·840	14·50
7. Post Office, ...	0·146	·70	0·180	·75	0·189	·70
8. Stamps, ...	0·424	2·02	0·441	1·83	0·470	1·75
9. Customs, ...	1·418	6·76	1·449	6·02	1·439	5·40
10. Mint, ...	0·090	·43	0·092	·38	0·086	·31
11. Tobacco, ...	0·081	·39	0·089	·37	0·088	·32
12. Miscellaneous, ...	1·434	6·84	1·636	6·80	1·977	7·40
Total Avg. Revenue,	20·964	100·	24·046	100·	26·656	100·
„ Avg. Charges,	19·301	92·1	22·338	92·9	24·113	90·5
Average Indian Sur- plus, ...	1·663	...	1·708	...	2·543	...

Branches of Revenue.	Five Years, 1852-53 to 1856-57.		
	Average Annual Revenue.	Ratio of each Branch to Total Revenue.	Ratio of each Branch to Total Revenue.
	Mlms. £.	Per Cent.	Per Cent.
1. Land, ...	16·183	55·40	53·93
2. Sayer, ...	1·182	4·05	·45
3. Excise, ...	0·037	·13	·44
4. Moturpha, ...	0·112	·38	·54
5. Salt, ...	2·677	9·17	11·26
6. Opium, ...	4·943	16·91	7·85
7. Post Office, ...	0·211	·73	·55
8. Stamps, ...	0·529	1·81	1·32
9. Customs, ...	1·611	5·52	6·29
10. Mint, ...	0·131	·45	·24
11. Tobacco, ...	0·018	·06	·12
12. Miscellaneous, ...	1·575	5·39	17·01
Total Average Revenue, ...	29·209	100·00	100·00
„ „ Charges, ...	27·093	92·75	93·89
Average Indian Surplus, ...	2·116	...	...
„ „ Deficiency, ...	...	...	...

The total revenue received therefore in sixty-four years has been £1,224,917,000. The total Indian charges have been £1,148,812,000. The surplus therefore during that period has been £76,105,000. The home charges however and the debt in that period amount to £130,504,000 and reduce the Indian surplus to a deficiency of £54,399,000 being the amount of the debt in India and at home.

JAILS IN THE MADRAS PRESIDENCY.

For the year 1856.

THE report was submitted to the Medical Board on the 25th October, 1857 and published in 1858. "The total deaths, on a daily average of 5,988 convicts, in all the jails, in 1856, was 279; in the former year it was 318 on an average strength of 6,363 convicts, it appears that, during the whole year, there were only 20 deaths from cholera among all classes of prisoners, against an average of 102 for each of the 10 preceding years. Of deaths from fever also only 24 occurred, the average for 10 years preceding being 30. There were 31 deaths from diarrhoea and dysentery, the deaths were above the average, being as 21 and 10 to a former average of about 15 and $7\frac{1}{2}$; of deaths from atrophy and dropsy too, the average has exceeded, being 93 against 74·7 for former years—no fewer than 31 of these occurred in the three jails of Salem, Combaconum and Coimbatore.

"Compared with the result of the ten years ending December, 1853 the present returns exhibit a very marked diminution of mortality. Amongst all classes of prisoners the ratio of deaths per thousand on average strength has been only 49 in place of 61; and amongst the convicted alone, the decrease in mortality has been even more marked, or as 46 to 61; and on the *aggregate* strength amongst this class (convicted) a remarkable contrast will be observed as 17 to 40 per thousand; a greater number of admissions appear in the present returns, but evidently the diseases have been milder in their nature, for the ratio of mortality to sick treated is under the average of former years by 1·7 per cent.; the increase of sickness has been 11 per cent. (or 116 to 105) above the average.

"This diminution of mortality may be fairly attributed, in some degree at any rate, to the great improvements that have been effected of late years in the jails, in the way of increased extent of accommodation and better ventilation, in the clothing and diet of the prisoners, and greater attention to cleanliness,

&c., and it may be expected, that when all the improvements frequently recommended by the Board have been fully carried into effect, that the mortality will be diminished to a much greater extent.

“The ratios of sick to strength, of deaths to strength, and of deaths to sick treated amongst the convicted class of prisoners, waiting for trial, and civil debtors, on the aggregate and average strength for 10 years; and also amongst the entire body of prisoners for the same period are as follows:—

	Convicted.		Untried.		Civil debtors.		3 Classes.	
	Aggregate.	Average.	Aggregate.	Average.	Aggregate.	Average.	Aggregate.	Average.
Ratio of Sick to Strength.	72.8	112.4	5.5	48.6	7.1	24.6	49.1	105.08
„ of deaths to Strength.	4.002	6.1	0.6	5.7	1.6	5.6	2.8	6.1
„ to Sick,	5.4		11.8		22.8		5 8	

Hitherto, as noticed by the Board in several of their more recent reports on the jails, the average strength only has been kept in view in preparing the returns of sickness, which has given very erroneous results, actually more than doubling the rate of sickness and mortality; this is seen more especially amongst the class of prisoners ‘waiting for trial.’ During the ten years, the aggregate strength amounts to 43,922, amongst which number the admissions have been 2,425 with 288 deaths; or 5.5 per cent. of sick, and 0.6 of deaths to strength. The average strength of this body of prisoners during the ten years is calculated to have been only 4,984, which on the same amount of sickness and casualties gives 48 per cent. of sick, and 5.7 of deaths to strength, eight and nine times respectively above the actual ratio of disease and mortality.”

With regard to the Board’s remark on the mode in which the sickness and mortality has hitherto been calculated, in relation to the average strength, leading to false conclusions, Mr. Rohde, Inspector of Prisons observes:—“I cannot but think that the Board are mistaken in their figures, 43,922 is stated to be the aggregate strength of prisoners waiting for trial during the 10 years, meaning I suppose the aggregate number of prisoners committed during that period; taking any year, say 1851 or

1852; the numbers exceeded 7,400 in each year. Again a great many of these are only one or two days 'under trial,' possibly not as many hours, no useful deduction can therefore be drawn from this statement, even if it were correct. The average strength is the only consideration in my opinion worth notice and that shews that the mortality is, as stated by the Board, 5·7 per cent. The other return would merely shew that of 43,922 persons incarcerated, 288 or 0·6 per cent. died while waiting trial, but within what time cannot be stated. I observe that of the 288 who died while under trial, 93 died of cholera and 41 from small-pox: of the small-pox deaths 30 were in Calicut jail, and of the cholera deaths, 19 in Madura, 16 in Coimbatore, 13 in Salem, and 15 in Cuddapah, more than two-thirds from only four jails, out of 32 jails."

The Inspector of Prisons also remarks on the disproportionate mortality among prisoners within a few months of their incarceration. He says "I have on a former occasion shewn that something is due to the larger numbers of persons within a few months in prison and who, thus, are subjected to any ill effect the prison may have on them, but I suspect that very many arrive in a state of chronic sickness. I was much struck with this a few weeks ago when visiting the jail of Coimbatore; of a party of recently arrived prisoners not one was free from scurvy, such men either recover or die within a year of their imprisonment and the survivors are placed in the position most favorable to health; restrained from excesses, well lodged, well clothed, well fed, with moderate labour and their health closely attended to."

The Mangalore jail is unhealthy and Mr. Rohde states that he is utterly unable to find any cause for its insalubrity.

The following table shews:—

The number of Admissions and Deaths in each gang of Prisoners, from 1849 to 1855, contrasted with the results of 1856.

	Strength of Gangs.	Admissions.	Treated.	Died.	Cholera.		Per centage of			
					Admitted.	Died.	Admissions to Strength.	Deaths to Strength.	Deaths to treated.	Deaths to Strength excluding cholera.
From 1849 to 1855,	Guindy,	1,007½	1,080	56	40	28	107.2	5.5	5.05	2.7
	Paumbum,	1,147½	3,607	25	...	...	314.4	2.1	0.6	2.1
	Moonchoultry,	434½	1,387	28	13	6	319.5	6.4	1.2	5.06
For 1856,	Guindy,	111	101	...	...	...	90.9	...	..	...
	Paumbum,	128	307	3	..	..	239.8	2.3	0.9	2.3
	Moonchoultry,	51	276	5	...	...	541.1	9.8	1.7	9.8

With regard to these returns the report observes that the ailments have been for the most part trivial. The nature of the work at Paumbum leads to a good deal of exposure hence the frequency of fever. Of the sick at Moonchoultry 276 in number no fewer than 131 are under the head of fever.

The following is an abstract return of the sick of the prisoners in the jails:—

Abstract Return of Sick of the Prisoners in the Jails.

Average Numerical Strength.		Diseases.																	Average daily number of Sick for the year.	
Remained 1855,	31st December, ...	Fever.	Diseases.														Total.	285		
			Small Pox.	Other Diseases of Eruptive Fevers.	Diseases of the Lungs.	Diseases of the Liver.	Diseases of the Stomach and Bowels.	Diseases of the Brain.	Epidemic Cholera.	Dropsies.	Rheumatic Affections.	Veneral Affections and diseases of the Genital Organs.	Abscesses and Ulcers.	Wounds and Injuries.	Punished.	Diseases of the Eye.			Diseases of the Skin.	Other Diseases.
6315	...	56	5	11	2	...	48	12	...	9	8	6	38	18	4	2	8	19	245	235
Admitted since,	...	2,019	90	150	166	15	1,705	89	37	185	399	103	1,296	456	409	106	181	512	7,938	...
Discharged,	...	2,016	62	153	146	14	1,603	81	35	136	388	103	1,302	453	400	105	184	442	7,623	...
Died,	...	24	32	...	15	...	111	13	20	47	3	...	1	2	...	1	...	63	332	...
Remaining 31st December, 1856.	...	35	1	8	7	1	39	7	2	11	16	6	31	19	13	2	5	26	229	...

THE INDIAN NAVY.

Parliamentary Papers.

A PARLIAMENTARY Paper dated 19th April, 1858 contains a full account of the extent and expenditure of the Indian Navy. The Navy comprises 15 steamers, two of which are of 1,800 tons, two of 1,450, four above 1000, two above 900, and five between 846 and 522. There are besides ten steamers built in India for the Indus flotilla, and nine sailing vessels, one the *Acbar* of 1,202 tons. The steamers are armed with 68-pounders, except two which carry 32-pounders, and one which carries a 12-pounder howitzer. The sailing vessels are armed with 32-pounders. The Bengal Marine directed by orders dated 7th January, to be incorporated with the Indian Navy, contains nine smaller steamers only one of which is above 500 tons. Three little sailing vessels are also employed in surveying. The Navy* contains:—

Number of Officers.	DESIGNATION.	Pay and Allowances per Month.
		<i>Rupees.</i>
1	Commodore and Commander-in-Chief of the Indian Navy,	2,500
8	Captains of a first-rate ship,	900
	„ second-rate ditto,	800
16	Commanders of a second-rate ship,	700
	„ third-rate ditto,	600
	„ fourth-rate ditto,	500
68	Lieutenants, the first 15 on the list,	150
	„ the remainder,	120
	Mates under three years' standing,	80
110	„ above „ ditto,	100
	Midshipmen „ „	50
	Pursers of a first-rate ship,	300
20	„ second-rate ditto,	270
	„ third-rate ditto,	250
	„ fourth-rate ditto,	220
24	Captain's clerks,	50
33	Acting masters,	150
25	Second masters,	100
Total, 305		

* The total cost of the Indian Navy though not given here appears from another Parliamentary return to be £650,000.

PUBLIC WORKS.

Parliamentary Papers.

A RETURN to the House of Commons dated 8th December, 1857, contains an account of the public works in India for 1853-54, 1854-55, 1855-56. The total amounts expended were:—

	1853-54.	1854-55.
Salaries, ...	Rs. 41,52,642	Rs. 40,20,537
Repairs, ...	64,34,910	54,54,948
New Works, ...	1,51,08,950	2,14,01,049
Land rented or bought,	4,30,888	2,81,992
Total,	Rs. 2,61,27,390	Rs. 3,11,58,526

The amount sanctioned for 1855-56 was Rs. 2,47,48,219, and the amount likely to be expended in 1856-57 was Rs. 2,20,15,420.

Of this sum there would be spent in

Bengal, ...	Rs. 39,61,334
Madras, ...	55,17,929
Bombay, ...	34,65,548
N. W. Provinces, ...	35,47,011
Punjab, ...	42,25,285
Straits, ...	70,593
Pegu, ...	8,68,870
Tenasserim and Martaban Provinces,	3,07,926
Hydrabad, ...	50,524

Total, ... Rs. 2,20,15,420

In 1854-55 the latest year for which the special destination of the money is supplied, the sums expended were thus distributed:—
Churches, Public Offices, Jails, and Miscellaneous

Buildings and Works, ...	Rs. 39,21,254
Embankments, ...	6,37,500
Roads and Bridges, ...	76,55,126
Lighthouses, Harbours, and Dockyards, ...	1,42,042
Inland Navigation, ...	2,80,000
Irrigation Works, ...	96,05,721
Railroads, ...	2,27,800
Electric Telegraph, ..	6,02,800
Military, ...	77,12,761
Unclassified, ..	3,73,522
Total, ..	Rs. 3,11,58,526

SURVEY OPERATIONS OF THE LOWER PROVINCES.

From 1st October, 1856 to 30th September, 1857.

ON 26th May, 1858 the Board of Revenue submit to the Government of Bengal a resumé of the operations of the Survey for the year ending 30th September, 1857. In 1st Division Mr. Pemberton with 7 European Assistants, and 41 Ameens surveyed 1480½ square miles in Rungpore at a cost of Rs. 23-14-8 a mile and the work was pronounced by the Surveyor General exceedingly good. Major Thuillier suggests that a topographical survey should be made by this party of Cooch Behar if no political objections exist. The non-professional operations were conducted by Mr. Morris with a covenanted Assistant and 3 Deputy Collectors over an area of 2,400 square miles covering the whole remainder of the district except a bit of jungle in the North. Property was found little intermixed and "of 340 boundary disputes, 254 were disposed of during the year; and of 197 appeals to the Superintendent, 171 were disposed of, the decisions of the Deputy Collectors in 114 cases being upheld, and reversed in only 15. The files of *izad* and *adumnishan* cases, or cases relating to surplus and missing lands, and of miscellaneous cases, on the other hand, were heavy at the close of the year." Some progress was made in clearing up the arrears of Registers, but they are still heavy, particularly in Bograh. The expenditure of the year is Rs. 68,665-8-1 or Rs. 28-10 on each square mile demarcated.

In the 2nd Division Major Smyth with 5 European Assistants and 36 Ameens surveyed 1097½ square miles in Manbhoom, Hooghly and Bancoorah. The expenditure was Rs. 36,002-12-3 yielding an average of Rs. 32-12-7. The maps are excellent. In the demarcation branch there was a deficiency of agency, and only the remainder of Burdwan or 320 square miles was surveyed. "Four Peshkars and 40 Ameens deputed in the beginning of the season to the district of Dinagepore, re-inforced in February by one Peshkar and 10 Ameens, the whole under the orders of Deputy Collector Baboo Mohendernath Bose, prepared 1,339 villages in that district, comprised in 1,047 hulkahs, with an estimated area of 1,000 square miles. The plots internally demarcated in this area numbered 1,797. Of 482 boundary disputes met with, 459 were disposed of, and of 2,187 *izad* and *adumnishan* cases and 947 miscellaneous cases, 2,221 and 772 respectively were disposed of during the year. In 141 boundary cases, the decisions of the Deputy Collectors were appealed to the Collector of Burdwan, who disposed of 96, confirming the decisions in 77, and reversing

them in eight instances." No attempt has been made to compile the registers of Burdwan, property being so much interlaced that the Survey must be completed first, and in Bancoorah less has been accomplished than the Board expected. "The cost of this branch aggregated Rupees 45,166-1-5, including the expense of an extra establishment defrayed from the savings, giving a mileage rate of Rupees 34-3-5 nearly, or Rupees 1-10-4 more than in the previous year."

In the 3rd Division Mr. Wyatt and when his health failed Mr. Swiney with 6 Europeans and 32 native Surveyors surveyed 1491½ square miles. The cost was Rs. 34,662-14-4 or 23-3-10 a mile. The maps are pretty good, but on account of the great interlacing of boundaries are in arrears. Mr. Muspratt with 4 Deputy Collectors demarcated an area of 1596 square miles. "The boundary disputes in this Division have again risen to the unprecedentedly large number of 3,543, of which 2,799 appertained to the season's demarcations, nearly two-thirds of the whole number occurring in the circuit of one Deputy Collector, Baboo Joy Chunder Mojoomdar. The number decided was 2,941; 2,114 of these being decided on their merits, 13 by arbitration, and the remainder being either compromised or struck off. Of the 602 cases pending at the close of the year, 431 have since been decided." No progress has been made in the registry work. The cost of demarcation was Rs. 47-7-1 per square mile.

In the 4th Division Capt. Gastrell with 7 European and 1 Native Assistant and 34 Ameens surveyed 1668½ square miles at a cost of Rs. 36,819-13-11½ or Rs. 22-1-1 per square mile. Mr. Watson with a covenanted Assistant, two native Deputy Collectors, 10 Peshkars and 100 Ameens demarcated 1100 square miles. "The boundary disputes, and *izads* and *adumni-shan* cases in this Division were comparatively few; but the miscellaneous cases were far more numerous than in any other Division, and the number of maps to be copied greater. The whole of these last, however, had been cleared off. The arrear of miscellaneous cases is ascribed to Mr. Watson's illness in September last for some weeks, during which the arrear accumulated. Of the 152 appeals disposed of, 117 were instituted during the year. In 88 cases, the decisions were affirmed, and reversed in one only, the rest being either remanded or removed from the file. In 50 cases, the decisions of the Superintendent, and in six cases, of the Covenanted Assistant, were appealed to the Revenue Commissioner, who upheld Mr. Watson's decisions in 38 cases, and revised or modified them in three cases. All Mr. Waterfield's decisions were affirmed." The progress of the registry work is unimportant. The cost was Rs. 67,649-3-3

61-6-6 per square mile, the country being difficult and property excessively interlaced.

In the 5th Division Mr. O'Donnel with 6 European Assistants and 27 Native Surveyors surveyed 1227½ square miles at a cost of Rs. 29,768-6-10 or Rs. 24-3-10 per square mile. The demarcation work is conducted by the Revenue Surveyor.

The following table shews the extent and cost of work done :—

DIVISIONS.	YEAR.	PROFESSIONAL.			NON-PROFESSIONAL.		
		Area surveyed in square miles.	Cost.	Rate per square mile.	Estimated area demarcated in square miles.	Cost.	Rate per square mile.
1st.	{ 1855-56, ...	1,049½	Rs. 31,252	29 12 3	1,700	Rs. 69,766	41 0 7
	{ 1856-57, ...	1,480½	" 36,272	24 7 10	2,400	" 68,665	28 10 0
	Difference, ...	+ 431½	+ 5,020	— 5 4 5	+ 700	— 1,101	— 12 6 7
2nd.	{ 1855-56, ...	1,578½	Rs. 35,551	22 8 3	1,440	Rs. 46,902	32 9 1
	{ 1856-57, ...	1,097½	" 37,099	33 12 7	1,000	" 45,166	34 3 5
	Difference, ...	— 480½	+ 1,548	+ 11 4 4	— 440	— 1,836	+ 1 10 4
3rd.	{ 1855-56, ...	1,433½	Rs. 35,479	24 11 2	1,480	Rs. 61,499	41 9 0
	{ 1856-57, ...	1,491½	" 35,527	23 13 1	1,596	" 66,143	41 7 1
	Difference, ...	+ 57½	+ 48	— 0 14 1	+ 116	+ 4,644	— 0 1 11
4th.	{ 1855-56, ...	1,351½	Rs. 33,498	24 12 5	1,900	Rs. 65,884	34 10 10
	{ 1856-57, ...	1,668½	" 37,516	22 7 8	1,100	" 67,549	61 6 6
	Difference, ...	+ 316½	+ 4,018	— 2 4 9	— 800	+ 1,665	+ 26 11 8
5th.	{ 1855-56, ...	789½	Rs. 26,796	33 15 2	.....	Rs. 2,100	0 0 0
	{ 1856-57, ...	1,227½	" 20,768	24 3 10	.....	" 4,093	0 0 0
	Difference, ...	+ 438½	+ 2,972	— 9 11 4	.....	+ 1,993	0 0 0

All the Revenue Surveyors are commended and all the subordinates but three. The Board remark on individuals, discuss but without changing the extent of the establishment and doubt the success of the plan by which professional and non-professional Survey is combined. They criticise certain modes of comparison suggested by Major Smyth and suggest the following :—

2nd Division.	Boundary dis- putes.	Izad and adum- nishan cases.	Miscellaneous cases.	Mehalwar plots.	Area demarcat- ed.	Cost.		Rate per square mille.		Area surveyed.		Cost.		Rate per square mille.	
						Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
2½ years un- der single system.	753	1,288	2,202	28,138	1,500	60,533	40 5 7	824	35 0 11						
	932	1,502	1,154	9,118	910	53,380	58 10 6	1,220	23 12 3						
	695	275	845	20,293	950	27,780	29 3 10	480	31 3 0						
Total, ...	2,380	3,065	4,201	57,549	3,360	1,41,693	42 2 9	2,524	29 13 11						
2½ years un- der combin- ed system.	695	275	845	20,293	950	27,780	29 3 10	480	31 3 0						
	731	952	1,610	1,08,150	1,440	46,902	32 9 1	1,579	22 8 3						
	459	2,221	772	17,693	1,320	45,166	34 3 5	1,098	33 12 7						
Total, ...	1,885	3,448	3,227	1,46,136	3,710	1,19,848	32 4 10	3,157	27 14 1						
Difference, ...	— 495	+ 383	— 974	+ 88,587	+ 350	— 21,845	— 9 13 11	+ 633	— 1 15 10						

" This comparison is, the Board believe, as close an approximation to the truth as can be obtained. The boundary disputes and miscellaneous cases were fewer during the period of the experiment, but the cases of excess and missing lands were more numerous. The plots found in villages internally demarcated were greatly more numerous, and shows the work done, in respect of these villages, to have been two and a half times heavier. From 20 to 30,000 chakeran tenures had to be defined, which contributed to swell the number. The area demarcated was larger, and was executed at a smaller cost, making the average per square mile Rs. 9-13-11 less. The area surveyed was greater, but being accomplished at a higher cost, affected the average, and reduced it to only Re. 1-15-10 per square mile in favor of the combined system. The comparison is on the whole in favor of the combined system, but it is to be observed that the diminished expense in the non-professional branch is not more than is accounted for by the single item of saving in the salaries of the late Superintendent and his Assistant; and the larger area demarcated and surveyed is accounted for by the fact of the establishments being larger than in the first period." Therefore it is not proposed to continue the experiment.

In a letter dated the 31st March, 1858 Major Thuillier, Deputy Surveyor General submits the results given above, and considers the total outturn of the year most satisfactory. " The total out-turn of the past most successful season amounts to 44,58,055 British acres, or 6,965 square miles, which gives the average of 1,393 square miles to each of the five Divisions employed under the Government of Bengal. This area lies in the districts in 68 Pergunnahs or portions of Pergunnahs and Rivers, and is included in 235 main circuits, having 6415 villages surveyed in 6411 traverse or hulka circuits, averaging 695 acres, inclusive of Akyab. The total expenditure of the season is Company's Rupees 1,76,183-1-1½ (one lakh, seventy-six thousand, one hundred and eight-three Rupees, one anna and one and a quarter pie) which sum includes the cost of the mehalawaree calculations of the Civil Branch of the Department to which the sum of Company's Rupees 3,505-2-0 (three thousand five hundred and five Rupees and two annas) in the aggregate, must be debited as usual. Deducting this item, therefore, the absolute cost of the professional survey is Company's Rupees 1,72,677-15-1½, which reduces the average rate per square mile to Company's Rupees 24-12-5, and per traverse circuit to Company's Rupees 26-14-10." The Report contains also the detailed reports of the Superintendents upon which the abstract report of the Board is founded.

THE KING OF OUDE.

Parliamentary Papers.

THE papers to be summarised relate to the treaty of 1837, with Mohummud Alli Shah, the then King of Oude, and are dated at irregular intervals between 1837 and 1854. The papers were printed in March, 1858.

The first letter in the collection is from Colonel Low, the Resident at Lucknow, and bears date the 8th July, 1837. It announces the death of Nusurooddeen Hyder, the King of Oude and the elevation to the throne of Nusseerooddowlah, the next heir. General Low previous to the elevation of Nusseerooddowlah had invited him to the palace and obtained, as a condition of his advancement to the throne of his ancestors, a written agreement as to a new treaty. In a letter dated the 9th July, 1837, the Resident submitted a copy of the propositions assented to by the young King. The Begum was even then about to seize, by a coup de main, the throne for her adopted grandson, Moonna Jaun. The next letter refers merely to the outbreak in the capital consequent upon the attempt of the Begum. The letters of the 8th, 9th, and 10th were answered on the 18th July, 1837.

The Governor General recorded his sense of the judgment and promptitude displayed by General Low and regretted the loss of life sustained by the infatuated adherents of the Begum. But the Governor General observed, "the expediency of obtaining from His Majesty the signature,* previous agreement, binding himself to absolute submissiveness, is the only point on which he feels that difference of opinion may be entertained; and if, on the one hand, it may appear to secure the objects of Government and to be justified by precedent, on the other, it seems open to misrepresentation, and from the reliance which might be placed on the character and position of His Majesty, superfluous."

As the King was then in a very infirm state of health Lord Auckland requests Colonel Low, to state his opinion as to the character, disposition, and qualification of the persons or person who appear to possess the best claim to the succession.

On the 12th July, Colonel Low, asked his Lordship if he were willing to confirm certain titles on the King of Oude. The titles were confirmed.

The draft of a modified treaty was forwarded by the Secretary to the Government of India, to Colonel Low, on the 20th July. The most important point of the modification is the clause admitting of the withdrawal of the British troops from the interior of Oude, their place to be supplied by an auxiliary force under the com-

* Deficient in original.

mand of British officers. The expense of such auxiliary force was not to exceed 20 lakhs and was to be paid by the King. The draft of the treaty is contained in this collection. Colonel Low in a letter dated the 28th July defends his proceedings with regard to Nusseeroddowlah. He says, "I had reason to believe that Nusseeroddowlah was a man of a highly respectable character, but he might at the same time, for anything I could know, be, as his father was (to our great inconvenience), an obstinate man; he might also be surrounded after his accession to the throne by unwise advisers, and his education under his father might have given him notions as to the dignity of his station as King of Oude, which would have made him strongly adverse to enter, after his confirmation on the throne through his own right of inheritance, into some of those very stipulations in a new treaty, about which the British Government might be most solicitous; and I felt that it would be equally wrong in me either to neglect the opportunity of taking any agreement from Nusseeroddowlah, or to run the risk of subsequently hampering my own Government by not wording the agreement in the most general terms; because, if I had entered into details without specific instructions, I might very likely have omitted some points which might be deemed essential by the Right Honourable the Governor-General in Council."

At the same time the Resident at Lucknow protests against the terms of the new treaty as contained in the draft already forwarded. He observes, "that draft shows quite unexpectedly to me that it is the intention of the Government to demand concessions of a nature that would be very grating to the feelings of any native sovereign of respectable character, and which must be peculiarly painful to the mind of the present king, who wishes to be very economical in his expenses; and who, to the best of my belief at least, knows by experience how to manage a country properly, and really wishes to govern his people with moderation and justice. In stating, however, that the proposed treaty will afflict the present king, I am alluding, in an especial degree, to that part of it which calls upon him to pay a very large sum of money annually for the maintenance of an army which is not to be under his own command, or even at his own disposal; a heavy payment, in fact, which he must clearly perceive is more for our own purposes and interests than for his, or for the direct advantage of his subjects. In respect to the other parts of the proposed treaty; I have already somewhat prepared the mind of the king, in answer to some questions which he put to me on the subject; but for the payment of an army under our control I have no means of preparing him."

In the event of the death of the then king before the ratifica-

tion of the new treaty Colonel Low asks whether he is to take any agreement from his eldest son.

The foregoing letter was answered on the 7th August, 1837, and Lord Auckland made no attempt to defend his draft of a new treaty. In the interim the Governor General had addressed a letter to the Court of Directors dated the 5th August, 1837, in which he remarks:—"Your Honourable Committee will observe that we have deemed this a fit opportunity for proposing a modification of the existing treaty with the Oude State. That treaty contains no provision for the direct interference of the British Government in the event of gross and continued mal-administration, while by requiring the instant presence of a portion of the British troops in Oude, it is to be feared that much facility may have been afforded to oppression. A proposition has, as your Honourable Committee will observe, been made, that a portion of the present numerous and disorderly Oude troops shall be disciplined by British officers."

On the 30th July, General Low writes that he considers it an imperative public duty to refer again to the Government before presenting the draft of the new treaty to the king of Oude. He thought that treaty must in any shape, be unpalatable and narrated the following anecdote in confirmation of his news:—"In a short conversation which I had with the king on the subject of the treaty on the 18th instant, I stated (in answer to a question from him) that in my opinion the Governor-General would naturally have great confidence in him, yet that the paramount state must, as a public duty, and in conformity with orders from England, look forward to possible future times, when there might not be so experienced or wise a man on the throne, and that therefore, 'to secure comfort and justice to the people of Oude,' my Government would, I thought, insist upon the right of sending our own European officers to superintend districts, if the people should unhappily be oppressed; and that there might be other objects also provided for in the new treaty of which I was ignorant. The idea of such new rights being ordered in his time, so hurt the old man's feelings, that it had an immediate effect on his disease, by producing an instant attack of spasms in the toes of both his feet, which put him to much pain at the time, and from which he did not entirely recover for 24 hours. I left him soon on that day in consequence of the pain he was suffering, after having soothed him to the best of my power, by saying that I felt every confidence that he would manage so well, that we should never have a desire to carry any harsh measures into effect in his reign. He said he would act up to our advice in every particular, 'So help him God.' I then took my leave, and visited him again on the 22d instant, when

he communicated to me in a more cheerful manner many of his plans about reductions of troops, and revenue assessment, &c. He expressed his anxious hope and trust he would always be treated with kindness in his old age by the Governor-General, and again declared that the country should be managed in every respect according to his Lordship's wishes."

Further, Colonel Low mentions that the Nawab Saadut Ali Khan, was compelled by the British Government against his most urgent remonstrances to surrender nearly two-thirds of his kingdom expressly for the purpose of our keeping up a sufficient army for the protection of the Kings and Kingdom of Oude against internal and external foes. Oude territory estimated in the 1st article of the treaty of 1801, at the yearly revenue of no less than one crore and thirty-five lakhs of rupees was taken possession of in perpetual by the British Government. Article 2 of that treaty solemnly declares that the King of Oude is released from the obligation of defraying the expenses of any additional troops, which at any time may be required for the protection of Oude and its dependencies. "The extreme measure of the British Government thus compelling an ally, who owed them at the time no tribute or subsidy, to surrender to them in perpetual sovereignty nearly two-thirds of his kingdom, caused much discussion and much censure even among the European part of the public. Now, if in addition to that extreme act, and that enormous acquisition of territory yielding now to the Company a revenue of upwards of two crores of rupees, and if, notwithstanding our solemn treaty then made, 'releasing' the 'ruler of Oude' from the obligation of 'defraying the expenses of any additional troops which at any time may be required for the protection of Oude,' we still should call upon him for a further subsidy, by the annual payment of twenty lacs of rupees for more troops, Colonel Low remarks, I do really and seriously conceive that the confidence of our native allies in the sacredness of British adherence to treaties would be much shaken, and that what would be gained in money or military strength would be greatly overbalanced by the loss of much of that high national reputation which the British power in India so happily enjoys; unless, indeed, the Government of India will pause a little, and wait till there shall be either some necessity, or, at least, some more manifest expediency for the adoption of such a measure than exists at the present moment."

Moreover it was formerly agreed that not one rupee of the revenues of Oude ought to be appropriated by the British Government beyond the expenses of managing the territory, if we should conceive it necessary to undertake its management by British Officers. But the most urgent reason against the en-

forcement of the new treaty was the belief of Colonel Low that the demand of 20 lakhs annually would bring about the most serious distress.

To this letter an answer was written by Lord Auckland on the 7th August, 1837. The Secretary to Government was instructed to observe that the proposed draft was not one "which the king is to be led to execute by any exercise of coercion. It contains provisions which are, thought, 'after full experience of the operation of the existing treaty, the best calculated to secure and reconcile the rights and interests both of the British and Oude Governments. It is deemed expedient and just to bring forward, on the part of the British Government, those provisions for discussion in the most distinct manner. It is hoped that the king will be satisfied of their propriety and advantage, and will give his assent to them."

With reference to the treaty of 1801, it is remarked :—"It is the essential spirit and object of the treaty of 1801 that the internal administration of the Oude country should, in its ordinary course and operations, be conducted in conformity to the counsels of the British Government, and that there should be an entire extinction of the military power of the Oude sovereign. The most positive right of interference is established by the express terms of the treaty, and it is obvious that the British Government could not engage to be solely capable and bound to suppress all internal insurrection, without exercising an effectual and complete superintendence and direction over the acts of the native administration. The military force to be maintained by the Oude State is most narrowly limited to an amount wholly insufficient for the independent preservation of tranquillity and the ordinary government of the country. Thus, in a strict execution of the treaty, the King of Oude would be placed in a situation of real dependence, little consistent with his dignity and comfort.

"That what has been stated is the true spirit and interest of the engagement of 1801, and was so at the time avowed and understood, is placed beyond doubt by the explicit declarations of the statesman by whom the treaty was framed, in his comments on it both to the Home Government and to the Nuwaub Wuzeer himself.

"If, after the full discussions with him, in which it will be your duty to explain and enforce the views of your Government, the king should still decidedly prefer to revert to an exact performance of the stipulations of 1801, His Lordship in Council, without reserve, admits his right to do so. In that case it will be proper to propose to expunge all the articles of the draft, excepting the 6th, 7th, and 8th, which do but provide a declared

remedy for the infraction, on the part of the king, of an essential part of those stipulations, and to add a further article, binding the king, after a definite reasonable period, say 12 months, to reduce his military establishment to the limit specified in Article 3 of the treaty of 1801 ; and in the event of his at any time desiring, with the consent of the British Government, to increase his military establishment beyond that standard, then to have such a portion of them raised, and commanded by British officers, with effectual security for their pay, as the British Government shall deem proper."

On this Mr. Ross minutes " I cannot bring myself to assent to the justice or to the necessity of requiring the present king to accede to a modification of that treaty." The Hon'ble Mr. Shakespear minutes :—" It does not appear to me to be practicable to require the king to entertain additional troops without cancelling the second article of the treaty of 1801, which specifically declares that ' His Excellency is relieved from the obligation of defraying the expenses of any additional troops which at any time may be required for the protection of Oude.'"

On these minutes Lord Auckland observes :—" Nothing is to be insisted on or required from the king but an adherence to the provisions of the treaty of 1801 ; and even this demand is to be made with every possible consideration for his present circumstances and difficulties. All else is to be matter of fair discussion and voluntary negotiation. I had attempted to state this strongly in the draft, and I have now again carefully revised its expressions, so as to avoid all semblance of compulsion in the tenor of the communication prescribed to Colonel Low.

" Surely, in offering to relax the restrictions imposed by the treaty of 1801 in a point so essential as that of the king's military establishment, we have the clearest right, and it is indeed a duty incumbent on us to provide for the essential maintenance of British supremacy."

Again on the 12th August, Mr. Ross states his objections to the instructions to the Resident at Lucknow to be that they declared the treaty of 1801 to be in full force. Had they declared that treaty cancelled in consequence of its infraction by the Oude Government then one of two courses would have been open to us " we might have assumed the Government of the Oude territories, and given to the people the benefit of an administration conducted by British officers ; or we might have required Nusseerooddowlah, as a condition of his accession to the throne being recognised, to agree to a new treaty, the terms of which might have been those of the modified treaty now proposed."

Mr. Shakespear also again declares his belief that it is quite impossible for the King voluntarily to consent to that part of

the treaty which provides for the maintenance of the auxiliary force.

All these minutes were forwarded to the Court of Directors in a letter dated the 11th September and on the 2nd October they were put in possession of a full report of the discussions held by the Resident at Lucknow with the Court of Oude under the instructions of the Supreme Government given on the 7th August, 1837.

Finally on the 11th September, General Low transmitted the new treaty with the Court of Oude signed and sealed, the King at the same time informing Lord Auckland that he would no longer allude to any unpleasant feelings which some of its provisions had caused to his mind. The 7th and 8th Articles of the Treaty were as follows:—"In modification of Article 6 of the treaty above referred to, it is hereby provided that the King of Oude will take into his immediate and earnest consideration, in concert with the British Resident, the best means of remedying the existing defects in the police and in the judicial and revenue administrations of his dominions; and that if His Majesty should neglect to attend to the advice and counsel of the British Government or its local representative, and if (which God forbid) gross and systematic oppression, anarchy, and misrule should hereafter at any time prevail within the Oude dominions, such as seriously to endanger the public tranquillity, the British Government reserves to itself the right of appointing its own officers to the management of whatsoever portions of the Oude territory, either to a small or to a great extent, in which such misrule as that above alluded to may have occurred, for so long a period as it may deem necessary, the surplus receipts in such case, after defraying all charges, to be paid into the king's treasury, and a true and faithful account rendered to His Majesty of the receipts, and expenditure of the territories so assumed.

"And it is hereby further agreed, that in case the Governor-General of India in Council should be compelled to resort to the exercise of the authority vested in him by Article 7 of this treaty, he will endeavour, as far as possible, to maintain (with such improvements as they may admit of) the native institutions and forms of administration within the assumed territories, so as to facilitate the restoration of those territories to the Sovereign of Oude when the proper period for such restoration shall arrive."

On the 11th April, 1858 the Court of Directors commenced to reply to the despatches we have noted to have been forwarded to them. They observe:—"The elevation to the throne of the legitimate heir, Nusseerooddowlah, uncle of the late king, must be ascribed solely to the intrepidity of the Resident; and we

heartily concur in the praises which you have bestowed upon him for that important service. But we are also compelled to agree with you in the disapproval of the execution of the written promise by which Nusseeroddowlah bound himself to sign any new treaty the Governor-General might dictate; such promise being in the nature of a preliminary condition, extorted from a prince from whom we had no right to demand any condition upon ascending his lawful throne.

"The assent of the King of Oude to this engagement, somewhat less stringent, as it appears, than that which was originally proposed to him by you, can be considered only as compulsory; and we perceive, in the correspondence of Lieutenant-Colonel Low, repeated proofs that the new sovereign regarded the principal articles of the compact as inflicting not only a pecuniary penalty upon his subjects, but a disgrace upon his crown and personal dignity.

"The objections made by the king to the treaty apply, first, to the reduction of the former military force, to the declared right of reorganising the civil government whenever and wherever found defective, and to the formation of an auxiliary force under the command of British officers, at an annual expense of 16 lacs of rupees chargeable upon the Oude revenues.

"As to the auxiliary force, and the consequent increase of pecuniary burdens upon the State of Oude for the avowed object of maintaining British authority, we consider that it is sufficient for the present occasion to say that we are happy to find the payments for the support of the auxiliary force are not to commence until after the expiration of 18 months from the 1st of September, 1837."

On the 10th April, 1838, the Secret Committee inform the Governor General that it is their wish, for reasons given in the despatch, that the King of Oude should be exonerated from the obligations of the treaty of the 11th September, 1837, to which his assent was most reluctantly given. They also affirm:—"Our policy, therefore, should be to preserve, as long as may be practicable, the existing native dynasties, and should the fall of them, or any one of them, from circumstances beyond our control, become inevitable, then to introduce such a system of government as may interfere in the least possible way with the institutions of the people, and with the employment of natives of rank, under proper superintendence, in the administration of the country."

In reference to this despatch the Governor-General minutes at Simlah on the 2nd July, 1838 that he is taught by the despatches on the Oude treaty to look for disapprobation where he had confidently assured himself of encouragement and defends

his views. In reply the Secret Committee inform the Governor General that their views have not changed.

On the 9th February, 1839 the President in Council thinks fit again to call the attention of the Court of Directors to the importance of strengthening the military position of the Government of India and previously on the 13th December, 1838 the Governor-General examines into the principle of the policy by which he is to be guided in any future attempt to impose a military check upon the several native States and thinks that the King of Oude should not be acquainted with the abrogation of the treaty of 1837 until the Court have reconsidered the matter. Mr. Robertson agrees with these views.

Other minutes bearing date the 28th January, 1839 follow but need not be summarised here, for, the Secret Committee write on the 15th April, 1839:—"We cannot consent to any further modification of our orders in respect to the treaty with the King of Oude, beyond those announced to you in our letter of the 5th November, 1838, in regard to the temporary retention of the Oude auxiliary force at the expense of the British Government, and not as a charge upon the State of Oude.

"Our objection to the King of Oude being called upon to defray the expense of these troops was founded upon the fact that we were already bound by treaty to defend the State of Oude against internal and external enemies, in consideration of the cession to us of a large portion of territory; and though we do not object to the retention of the auxiliary troops as a portion of the British army, especially in the present crisis of affairs, when the demands upon your military resources have so much increased, we are decidedly of opinion that no delay should take place in announcing, in such manner as the Governor-General may think fit, to the King of Oude, the disallowance of the treaty of 11th September, 1837, and the restoration of our relations with the State of Oude to the footing on which they previously stood.

"You will receive every support from us in the measures that may be necessary in securing good government to the people of Oude, under the stipulations of the treaty of 1801, but we are disposed to place considerable reliance on the favourable disposition manifested by the king, and the judicious advice which will be tendered to him by the Resident under your orders."

Finally on the 8th July, 1839 Lord Auckland in obedience with the orders of the Court remitted the demand of sixteen lakhs made in the treaty of the 11th September, 1837.

On the 11th December, 1847 Lord Hardinge addressed a memorandum to the King of Oude advising with the rulers of the

Kingdom of Oude in accordance, expressly, with the stipulations of the treaty of 1801.

In 1854 the Supreme Government called the attention of the Court of Directors to the fact that the abrogated treaty of 1837 was inserted in a compilation of existing treaties printed by the Government of India in 1845. They observe:—"By the Governor-General's letter to the address of the Secret Committee, dated 15th July, 1839 (No. 21), your Honourable Court was informed of the nature of the communication that was made to the King of Oude, in consequence of your disallowance of the treaty. Its total abrogation was not announced. His Majesty was simply advised of the determination of the Government of India to relieve him from 'all that is onerous in the conditions respecting the force, and to defray the expense of the portion of it already organized from the British Treasury.'

"Lest, adverting to this circumstance, your Honourable Court should contemplate the revocation of your orders for the abrogation of the treaty of 1837, now that that instrument has been made public in the Parliamentary papers above alluded to as still in force, we think it proper to remind you that the view taken by your Honourable Court was publicly declared at the time, and that 'pledges' upon the non-ratification of the treaty were given to Parliament.

"It may be that, having regard to this fact, and to the practical disavowal of those articles which relate to the Oude auxiliary force, as well as to the lapse of 16 or 17 years from the date of these transactions, your Honourable Court will concur with us in considering it unadvisable on those grounds, as well as on grounds of general policy, to recal the instructions under which the treaty of 1837 was abrogated."

The Court of Directors in answer to this despatch and to the minute of Lord Dalhousie on the 14th August, 1854 to prove that the treaty of 1837 had no existence, remark:—"It is to be regretted that the treaty should have been included in the collection of treaties prepared at Calcutta in 1845, and presented to Parliament in 1853.

"Nevertheless, as it is impossible to recal or cancel the printed copies of these papers which have been issued, it is not obvious how the mistake can be rectified.

"We apprehend that the best course will be to take no step whatever, and to leave matters as they stand, until some practical question arises, which must be dealt with according to the circumstances of the time."

THE PRESS.

Parliamentary Papers.

A RETURN to the House of Commons, dated 26th March, contains the history of the connection of the East India Company with the Press. On 17th January, 1823, the Court addressed a letter to the Board of Control describing the history and position of the Press. In 1791, Mr. W. Duane was arrested by the Bengal Government for reflecting upon Colonel Canaple, Commandant of the Affairs of the French Nation. The Supreme Court affirmed the right of Government to deport, but the French Agent interceded, "but having afterwards published, in a paper called *The World*, of which he was Editor, a number of improper and intemperate articles, and particularly an inflammatory address to the army, he was again arrested and sent to Europe, in the end of 1794, and of this proceeding the Court of Directors highly approved." Several censures on Editors followed, and in 1799, the following rules were published :—"1st. Every Printer of a newspaper to print his name at the bottom of the paper. 2d. Every Editor and Proprietor of a paper to deliver in his name and place of abode to the Secretary to Government. 3d. No paper to be published on a Sunday. 4th. No paper to be published at all until it shall have been previously inspected by the Secretary to the Government, or by a person authorised by him for that purpose. 5th. The penalty for offending against any of the above regulations to be immediate embarkation for Europe." In 1801, it was proposed to establish a *Moniteur*. "The increase of private printing presses in India; unlicensed, however controlled, is an evil of the first magnitude in its consequences; of this, sufficient proof is to be found in their scandalous outrages from the year 1793 to 1798. Useless to literature and to the public, and dubiously profitable to the speculators, they serve only to maintain in needy indolence a few European adventurers, who are found unfit to engage in any creditable method of subsistence. The establishment of a press by the Supreme Government would effectually silence those which now exist, and would as certainly prevent the establishment of such in future." The plan dropped, and in 1801, the Editor of the *Calcutta Gazette* was prohibited publishing anything relating to the Army, unless it had previously appeared in the *Gazette*. "In 1811, the Proprietors of all the presses in Calcutta and its dependencies were directed to cause the names of the Printers to be affixed to all works, papers, advertisements, &c., printed at or issuing from those presses, on pain of incurring the displeasure of Government." In 1812, all

advertisements were ordered to be submitted to inspection. Advertisements for sale, purchase, hire, and notices in general were exempted from this order. In 1813, the following new rules were issued:—"1. That the proof sheets of all newspapers, including supplements, and all extra publications, be previously sent to the Chief Secretary for revision. 2. That all notices, hand-bills and other ephemeral publications, be in like manner previously transmitted for the Chief Secretary's revision. 3. That the titles of all original works proposed to be published, be also sent to the Chief Secretary for his information, who will thereupon either sanction the publication of them, or require the work itself for inspection, as may appear proper. 4. The rules established on the 13th May, 1799, and the 6th August, 1801, to be in full force and effect, except in so far as the same may be modified by the preceding instructions." Continual discussions took place between the Editors, Dr. Bryce in particular, and the censor, and in 1818, the censorship was abolished and the following new rules passed:—"The Editors of newspapers are prohibited from publishing any matter coming under the following heads, *viz.* :—1. Animadversions on the measures and proceedings of the Honourable Court of Directors, or other public authorities in England, connected with the Government of India, or disquisitions on political transactions of the local administration, or offensive remarks levelled at the public conduct of the Members of the Council, of the Judges of the Supreme Court, or of the Lord Bishop of Calcutta. 2. Discussions having a tendency to create alarm or suspicion among the native population of any intended interference with their religious opinions or observances. 3. The republication from English or other newspapers of passages coming under any of the above heads, or otherwise calculated to affect the British power or reputation in India. 4. Private scandal and personal remarks on individuals tending to excite dissension in society." The Court submitted a despatch to the Board of Control ordering the censorship to be re-established, but the Board never returned the despatch. The orders abolishing the censorship were passed by Lord Hastings, who in answer to an address from the people of Madras said "my removal of restrictions from the press has been mentioned in laudatory language; I might easily have adopted that procedure without any length of cautious consideration, from my habit of regarding the freedom of publication as a natural right of my fellow-subjects, to be narrowed only by special and urgent cause assigned. The seeing no direct necessity for those invidious shackles, might have sufficed to make me break them. I know myself, however, to have been guided in the step by a positive and well-weighed policy. If our

motives of action are worthy, it must be wise to render them intelligible throughout an empire, our hold on which is opinion. Further, it is salutary for supreme authority, even when its intentions are most pure, to look to the control of public scrutiny. While conscious of rectitude, that authority can lose nothing of its strength by its exposure to general comment; on the contrary, it acquires incalculable addition of force. That Government which has nothing to disguise, wields the most powerful instrument that can appertain to sovereign rule. It carries with it the united reliance and effort of the whole mass of the governed; and let the triumph of our beloved country, in its awful contest with tyrant-ridden France, speak the value of a spirit to be found only in men accustomed to indulge and express their honest sentiments." In 1819, Mr. Buckingham, Editor of the *Calcutta Journal*, was warned for aspersing the character of Governor Elliot, and again for insinuating that the Madras Government tried to check the circulation of the *Calcutta Journal*. Continual warnings followed, and in November, 1821, the paper contained the following paragraph:—"Such is the boon of a free press in Asia, with which the world has rung for the last three years; and the praise of those who knew not what awaited it, is not even yet at an end. Such is the salutary control of public opinion on supreme authority, and the value of a spirit, to be found only in men accustomed to indulge and express their honest sentiments." This paragraph was severely animadverted on, but the Governor General declined to deport Mr. Buckingham, and again in July, 1822, annulled by his single vote the votes of his Council for deportation. The Court of Directors continue:—"We have thus given a short summary of the excesses of the Calcutta periodical press, during a period of upwards of 30 years, down to the date of the latest information which has been received, accompanied with a detail of the measures, both of punishment and regulation, by which they have been met by the Bengal Government." And they recount the similar excesses which occurred in Madras and Bombay as follows:—"One instance had occurred, previously to the introduction of the censorship at Madras, in which the Government had found it necessary to order an Editor of a paper to Europe; that the censorship has not yet been removed by the Madras Government; and that at that settlement, so far as is known, the press causes neither uneasiness to Government nor disturbance to the community; but that the Madras Government, with reference to what has been done elsewhere, and to the general agitation of the question, have lately represented to the Court, in the strongest terms, the impolicy and danger of liberating the press from the most absolute control. And, lastly, it appears that at Bom-

bay, where the censorship was imposed as early as 1791, no case had occurred under its operation against which the Bombay Government thought itself called upon to proceed with severity; but that in December, 1819, the censorship was taken off, and that the same regulations for the conduct of the press were established at Bombay as in Bengal." The Court continue to observe that society in India consists of the Company's servants, Her Majesty's servants, merchants and adventurers. Company's and Queen's servants ought to support Government, while a free press opens the door for individuals to bring forward their supposed complaints. Merchants also are benefited by restriction for "the social circle in which they move being circumscribed, is easily disturbed, and in such circumstances everything, whether in the shape of personal allusion or of general remark, tending to create political differences, produces a degree of uneasiness and agitation, of which it is difficult for persons living in an European capital to form an adequate conception. To the class of adventurers, whether licensed or unlicensed, who are unemployed, whether from choice or necessity, a free press might indeed furnish amusement or occupation. But the taste of such as are idle from choice is not to be consulted, nor is it a matter of public concern to provide for those who proceed clandestinely to India. Persons who go to India with a license have, in almost all cases, the prospect of obtaining a subsistence in another way; still it is probable that the conduct of the press in India would fall into the hands of this class were periodical publications to be indefinitely multiplied. To cut off from those already there, an employment which they never contemplated, cannot be deemed the infliction of a hardship. To encourage, by new inducements, an influx to India of Europeans not in the Company's service would be a departure from the policy which has been hitherto observed in maintaining the connexion between the two countries; and, without meaning to speak disparagingly of this class, it is not composed of persons qualified by their literary attainments to conduct the press to advantage; neither is there a sufficient security in their characters against its being converted into an engine of great mischief." The Court observe also that a free press cannot be confined to Europeans, that four native newspapers were started on the withdrawal of the censorship, and that such a press must be injurious. The half castes may be made, as they must at no remote period become, a source of great anxiety to Government. A free press is equally inexpedient as regards pure natives. "Under a free government the press is at once the organ of expressing, and the instrument of enlightening and influencing public opinion; but in India public opinion cannot be said to

exist. The advantages to the governed produced by public opinion in other countries, under a free government, are in some measure secured to the people of India by a chain of responsibility and a gradation of checks, extending from the lowest executive officers in the service, through the local governments and the constituted authorities at home, to the British Parliament, and through the Parliament to the people of England. The regulations of the Indian governments, under which taxes are levied and justice is administered, are not only promulgated in India, but are regularly sent home and laid before Parliament. Every communication which takes place in India upon every public measure is placed upon record; and complete diaries of the proceedings of the local governments, in every department of administration, being annually transmitted to the Court of Directors, the fullest information respecting those proceedings, as well as the proceedings at home to which they give rise, are at all times accessible to the public of this country through their representatives in Parliament; and the Indian governments thus become amenable, in the last resort, to a public far more enlightened than the Indian public, and accustomed, by the enjoyment of popular rights, to view with exceeding jealousy measures originating in absolute power. The governments in India exercise a delegated authority, derived from the Court of Directors and the Board of Control. The Government of India resides in this country, and is of course responsible to the English public, in common with the Government of England. It is in this country, therefore, and not in India, that its measures ought to be discussed." Moreover any diminution of the native respect for Government would endanger its safety, and that diminution must follow when "a power which has overthrown mighty empires, and subjugated great nations descends to measure its strength with the Editor of a newspaper, and retires baffled and beaten from the conflict. As to the diffusion of intelligence among the natives that is a high object, but it is not to be obtained through newspapers, whose aim is to gratify the curiosity rather than enlighten the understanding, to excite the passions rather than to exercise the reason of their readers. But the delicacy of our situation in India cannot be well understood without special advertence to the circumstance of the Government being dependent in a great degree for its security on a native army, which, though better paid, with reference to the wages of labour, than any other army in the world, contains in its organisation some elements of discontent. The exclusion of the natives from its higher ranks must necessarily be a source of heart-burning to men of family and ambition; and when a sense of mortification is united with a

spirit of enterprise, their joint workings are not easily daunted or repressed. It may be difficult to retain the fidelity of men of this description, with all the care and caution that can be exercised ; but it would appear to be either a lamentable infatuation, or unpardonable rashness, to allow them to be goaded on to revolt, by means over which we possess or may obtain control. Whatever English newspapers are published at the Presidencies will naturally find their way to the principal military stations. Many of the native officers can read and understand English, and by means of the native servants of the European officers it will not be difficult for them to obtain the perusal of those papers, containing a perhaps exaggerated representation of their grievances or an inflammatory incentive to rebellion, which, from their assemblage in garrisons and cantonments, they have better means of concerting than any other portion of the population."

Considering the question of absolute freedom settled, the Court of Directors turn to the question of the restraints necessary. The English law of libel would be insufficient from the close links which bind society in the Presidencies together. Deportation is a bad remedy it "has an arbitrary character, the Governor who resorts to it acting in the three-fold capacity of accuser, judge, and executor of his own sentence ; that it is a punishment which may be attended with complete ruin to the object of it ; that it is not susceptible of any mitigation ; in short, that it is the same in all cases, however different be the degrees of delinquency in each, and that therefore there must be strong repugnance to resort to it ; an expedient preventive of those offences which call for the infliction of such a punishment has claims to peculiar favour." Therefore the censorship which prevents the necessity of having resort to this extreme penalty should be reimposed. With regard to native Editors Parliament should increase the power of Government.

In reply the Board of Control on 5th April, 1823 refused to interfere.

On 1st February, 1836 the Court of Directors reprimand the Governor General in Council for passing an Act releasing the press from restrictions. That Act they consider is "in opposition to all our previous orders, to the solemn decisions both of the Supreme Court at Calcutta and of His Majesty's Privy Council, delivered, in both cases, after full arguments on both sides of the question, to the recorded opinions of all preceding Governments of Bengal, Madras, and Bombay, and more especially to the carefully considered measure of Lord William Bentinck and Sir Frederick Adam, for extending the Licensing Regulation to Madras." They consider also that the passing of such

an Act without a reference at home was wholly indefensible, and say, " we would be prepared at once to avail ourselves of the power entrusted to us by Act of Parliament, and disallow your new law when passed, were we not aware that the immediate repeal of such a law, however ill-advised and uncalled for its enactment may have been, might be productive of mischievous results."

On 18th June, 1857 the Governor General in Council draws the attention of the Court of Directors to an Act No. XV. of 1857 which passed the Legislative Council of 13th June, 1857 to regulate the establishment of Printing Presses and to restrain in certain cases the circulation of printed books and papers. Under this Act all Proprietors of presses were compelled to apply for licenses. These licenses were given on certain conditions the violation of any of which enabled Government to seize the types and presses of the offender. The conditions were as follows :—" With reference to Act No. XV. of 1857, the Governor-General in Council resolves that application for licenses to keep or use any printing press or types or other materials and articles for printing within the town of Calcutta, shall be made to the Commissioner of Police, and that the Commissioner shall forward a copy of every such application to the Government of India, in the Home Department, from whence licenses will be issued.

" His Lordship in Council authorises the Lieutenant-Governor of Bengal to grant licenses under the said Act, and to appoint any person or persons to receive applications for such licenses in any part of the Lower Provinces of Bengal, except the town of Calcutta.

" His Lordship in Council authorises the Lieutenant-Governor of the North-Western Provinces to grant licenses under the said Act, and to appoint any person or persons to receive applications for such licenses in any part of the North-Western Provinces of the Presidency of Bengal.

" His Lordship in Council authorises the Governor of the Straits Settlements, the Chief Commissioners of the Punjab and Oude, and the Commissioners of Mysore, Coorg, Nagpore, Pegu, and the Tenasserim and Martaban Provinces, severally, to grant licenses under the said Act, and to appoint any person or persons to receive applications for such licenses, within the provinces, districts, and settlements under their control respectively.

" His Lordship in Council resolves that the conditions upon which licenses to keep or use any printing press or types or other materials or articles for printing are ordinarily to be granted, shall be as follows :—

" 1. That no book, pamphlet, newspaper, or other work printed at such press, or with such materials or articles, shall contain

any observations or statements impugning the motives or designs of the British Government either in England or in India, or in any way tending to bring the said Government into hatred or contempt, to excite disaffection, or unlawful resistance to its orders, or to weaken its lawful authority, or the lawful authority of its civil or military servants.

"2. That no such book, pamphlet, newspaper or other work shall contain observations or statements having a tendency to create alarm or suspicion among the native population, of any intended interference by Government with their religious opinions and observances.

"3. That no such book, pamphlet, newspaper or other work shall contain observations having a tendency to weaken the friendship towards the British Government of native princes, chiefs, or states in dependence upon or alliance with it.

"The above conditions apply equally to original matter and to matter copied from other publications.

"His Lordship in Council resolves that a copy of every book, pamphlet, newspaper or other work printed or published in the town of Calcutta, shall be immediately forwarded to the Commissioner of Police, by whom all such copies will be immediately transmitted to the Secretary to the Government of India, in the Home Department.

"Ordered, that a notification to the above effect be published in the *Calcutta Gazette*, and that corresponding instructions be sent to the several local Governments and authorities noted in the resolution."

On 29th June it was resolved to warn the publisher of the newspaper called *The Friend of India* against a "repetition of remarks of the dangerous nature," of those in an article of the 25th June called the "Centenary of Plassey." On 31st July also the Governor General in Council reports that "the law officers of the Government had been directed to take the necessary steps for bringing the Printers and Publishers of the *Doorbeen*, the *Sultan-ul-Ikbar*, and the *Sumachar Soodaburshun*, to trial before the Supreme Court on a charge of publishing seditious libels. A translation of the libels in question was communicated to your Honourable Court in the same despatch. True bills were found by the grand jury at the last sessions against the defendants; but, under the circumstances explained, we authorised the Advocate-General not to press for punishment, if the defendants connected with the two former papers would plead guilty, and express contrition for their offence. This course was accordingly adopted; the defendants pleaded guilty, and were discharged after entering into recognisances to appear and receive judgment when called upon. The third defendant was prosecuted on the

charge brought against him ; but the trial resulted in a verdict of not guilty." On 3rd July the press called *Gulshun-i-now-bahar* was seized, the paper of that name having published malignant articles. On 10th September the *Hurkaru* was warned and on the 18th suppressed, but on apology from the Proprietor the license was restored.

The Blue book contains also letters from Lord Elphinstone, Mr. Lumsden, Mr. Malet and Mr. Frere. Lord Elphinstone argues :—"If then a despotic form of Government is indeed the only one suitable to the state of the country as well as the only one possible for us, it follows that if the unrestricted liberty of the press is incompatible with this form of Government, and with the continuance of our rule in this country, that it must be curtailed ; the restrictions need not be many ; but systematic abuse of the Government and misrepresentation of its acts, and all attempts to create ill-feeling between the different classes of the community, and especially between the European officers and the native soldiery, must be prevented."

Mr. Lumsden says :—"I have but small doubt myself that the agency of a free native press has been exerted very banefully, though perhaps indirectly, in producing the catastrophe under which we are now suffering. There are, and have long been, other causes which are patent to those who will reflect, and who have observed our policy for several years past. But the freedom of the native press is certainly one of these causes. I must however observe, that it is now rather late in the day to impose restrictions on the press such as the new Act legalizes, and it is a question to me how far they will now be found effectual. With a few rare exceptions it is admitted that the measure was uncalled-for by the European portion of the press, indeed the Governor General says as much. The strictures of the European prints on the proceedings of the several Indian Governments have seldom passed a justifiable limit, and indeed have often been profitable, however severe." But he accepts the Act as he does not see how it is to affect the respectable portion of the press. "Since no Governor General or local Government could venture to take the extreme step of withdrawing a license from a paper without justification, or unless an Editor had so grossly committed himself as to have lost the sympathy and respect of his fellow Editors, a case which has rarely occurred in the annals of Anglo-Indian journalism."

Mr. Malet advises that "all native newspapers should be 'regularly read by trustworthy persons, with instructions to bring to notice any objectionable passages, whereupon any measures which might appear necessary could be taken regarding them. At a time like the present, when productions like those enclosed would be

calculated to do real harm, the ordinary courts would punish anything seditious with exemplary severity, and public opinion would fully bear them out in so doing.' ”

THE TRADE OF BENGAL.

1850—1858.

Commercial Annal.

THE trade of Calcutta for the past eight years has been in merchandize.

	Imports.	Exports.	Total.
1850-51,	Rs. 5,90,40,567	Rs. 10,44,99,469	Rs. 16,45,40,036
1851-52,	6,75,14,750	10,84,63,897	17,59,78,647
1852-53,	4,86,90,452	11,18,36,891	16,05,27,343
1853-54,	5,58,98,251	10,67,70,907	16,26,69,158
1854-55,	6,63,22,292	10,72,10,593	17,35,32,785
1855-56,	8,06,08,182	12,60,92,637	20,68,00,719
1856-57,	8,02,41,782	13,66,47,918	21,68,89,700
1857-58,	7,40,74,244	13,38,10,495	20,78,84,739

The Imports and Exports of Treasure in addition were :—

	Imports.	Exports.
1850-51, ..	Rs. 1,14,92,343	Rs. 27,81,426
1851-52, ...	2,49,63,184	19,45,809
1852-53, ...	3,49,66,251	50,79,978
1853-54, ...	2,12,90,787	74,33,758
1854-55, ...	64,08,606	1,20,54,114
1855-56, ...	5,81,00,445	1,14,28,310
1856-57, ...	6,67,60,533	99,89,531
1857-58, ...	7,80,70,887	85,96,918

Total, ... Rs. 30,20,53,036 Total, Rs. 5,93,09,844

During the same period the trade with Great Britain has been :—

	Imports.	Exports.	Total.
1850-51, Rs.	4,91,12,788	Rs. 4,93,74,209	Rs. 9,84,86,997
1851-52,	6,51,53,826	4,78,98,188	11,30,52,014
1852-53,	5,45,27,696	4,50,66,043	9,95,93,739
1853-54,	5,86,16,555	3,95,81,250	9,81,97,805
1854-55,	5,33,89,549	3,87,28,637	9,21,18,186
1855-56,	9,89,31,028	5,01,37,983	14,90,69,011
1856-57,	10,73,95,699	4,66,74,239	15,40,69,938
1857-58,	10,11,94,313	3,89,71,601	14,01,65,914

The import tonnage of the port during the eight years has been:—

		Ships.	Tonnage.
1850-51, ...	...	1 030	3,66,711
1851-52, ...	...	886	4,25,553
1852-53, ...	...	813	4,07,735
1853-54, ...	..	823	4,06,097
1854-55, ..	...	1,055	5,21,814
1855-56, ...	...	1,285	6,84,618
1856-57, ..	...	1,124	6,42,323
1857-58, ...	...	1,006	6,34,624

THE MUTINIES IN THE EAST INDIES.

Parliamentary Papers.

THESE papers contain an official narrative of events connected with the mutinies from the end of September, 1857 to the 4th December, of the same year. Moreover they include a mass of miscellaneous information connected with incidents arising from attempts to suppress the revolt.

On the 26th of December a portion of the Shahabad and Behar districts were greatly disturbed by the rebels. Their leaders were Judhur Singh, and Ummur Singh. It was also rumoured that Kooer Singh was about to make a descent upon the Division. Besides these leaders and their followers were the 5th Irregular Cavalry who mutinied at Rohnee and marched towards the Soane, across which river, they were in October helped by Judhur Singh. Previous to the 20th of September, the telegraph wire between Dehree and Benares had been cut and the daks could not proceed. Through the indefatigable exertions of Mr. Dove, the Officiating Post Master General communication was fully restored by the 24th.

On the 16th September, Captain Rattray at Gya received a telegraph ordering him to proceed at once to Dehree, with all the available force. Lieutenant Stanton was then at Dehree with 70 Sikhs. After uniting with these the force under Captain Rattray amounted to two hundred and forty five Sikhs and thirty-seven Europeans. Against this order Mr. Money remonstrated on the ground that Gya would be in danger and that Captain Rattray would be at Dehree, for the want of thorough discipline on the part of the Sikhs, unable to cope with Judhur Singh's force. Mr. Money's objections were overruled by the Government of Bengal who observed in a letter to the Commis-

sioner of Patna on the 23rd of September :—" Mr. Money, like almost all local officers, looks only to his own district, and seems hardly to be conscious that there are any interests beyond it. This is very natural and very venial, and the Lieutenant-Governor is by no means anxious to blame or to repress it. On the contrary, it is better that local officers should be allowed to argue strongly and earnestly, each for the interests committed to his particular care, so that the superior authorities may have, to aid them in their judgment upon the need of the whole empire, the fullest possible information, and, as it were, the most solicitous pleading for each particular part of it." On the 23rd September, Colonel Fischer reached the Soane in pursuit of the Ramghur mutineers and pushed on to Dhoondwa where he arrived on the 29th.

On the 25th Lieutenant Stanton attacked some villages held by the rebels near Dehrce and in the skirmish the village of Etawah was entirely destroyed by fire. The Government of Bengal thought the example would prove salutary.

On the 28th a party of Seikhs and sowars under the command of Lieutenant Baker surprised the village of Sarohce and brought away a large quantity of grain. The sowars here mentioned formed part of the Bengal Police Battalion and had been disarmed by Lieutenant Baker. On Captain Rattray's arrival at Dehrce thinking that some of the men might do good service a portion were rearm'd and the experiment was attended with the best results. In order however the more readily to restore order in the district of Shahabad the Commissioner of Patna proposed to send the naval Brigade appointed for service in the Patna Division to Buxar. They could be, in case of need, supported by Captain Sotheby's Brigade then in the Chupra district.

This district was reoccupied on the 12th August, 1857. In the town of Chupra immediately on the arrival of the European officials good order was restored. Amongst the natives most worthy of praise was Kazee Ramzan Ali, who during the absence of properly constituted authority took upon himself the responsibility of acting as Magistrate. This man was favourably recommended by Mr. Samuells for an appointment of trust, which was at once conferred accompanied by a complimentary letter from the Lieutenant Governor. Other native officials in the Patna Division behaved with equal loyalty and were suitably rewarded. Thus Shah Kubcer-ood-deen Ahmed, Sujjadeh Nusheer of Sasseram, a loyal and zealous servant received a khilut of 10,000 rupees and a sunnud under the seal and signature of the Governor General.

Mahomed Wajed, Moonsiff of Sewan was promoted from a first grade Moonsiff to a Principal Sudder Ameen.

Baboo 'Nundeeput Mahtoe was presented with a handsome watch on which was engraved a suitable inscription and was granted an honorary title.

Hyder Buksh, the Nazir of the Foujdary Court at Mozufferpore received a sword valued at 200 rupees, and a purse of Rs. 500. Moheshloll, the jail Darogah at Mozufferpore was presented with a sword valued at Rs. 200; to the Burrowly thannadar, who saved the lives of Mr. Lynch and Mr. McDonell, was likewise given a sword; Enayut Hoscin, second grade Darogah was promoted to the first grade. Mahomed Fureed-ood-deen, 2nd grade Moonsiff was noted for early promotion.

But to return, besides making these arrangements for the safety of the Chupra district Mr. Samuells detained at Dinapore the 17th M. N. I. then on their way up country, for this act he incurred the censure of the Governor General. Mr. Samuells shewed that according to Mr. Beadon's telegraphic message of the 8th September, the troops were to be landed at Dinapore. Mr. Samuells was not therefore instrumental in landing this detachment and had he given no orders concerning the removal of the detachment it would still have remained at Dinapore. Mr. Samuells was therefore absolved by his Lordship in Council from all blame.

Late in September, Mr. Yule, the Commissioner of the Bhangulpore Division reported to the Supreme Government that the successful outbreak of the 5th Irregulars was likely to have a bad effect on the 32nd Native Infantry. Mr. Yule was justified in his anticipations. For, on the 9th October, a detachment of the "32nd Native Infantry, stationed at Deoghur, suddenly mutinied, and, after murdering the Assistant Commissioner, Mr. Ronald, and Lieutenant Cooper, in command of the detachment, plundered the bazar of Deoghur and moved off to Rohnce. From Rohnce they proceeded to the westward on the morning of the 10th, with the apparent intention of following the route of the mutineers of the 5th Irregular Cavalry, and proceeding towards the Soane, via Kurruckdea, Nowadah and Gyah." The Head Quarters of this regiment on the next day left Bowsee on their way down to Ranecgunge, to which station a wing of H. M.'s 13th regiment and two guns were despatched to prevent any attempt at mutiny on the arrival of the corps at that place.

The Sudder station of Chota Nagpore was reoccupied on the 23rd September. The Commissioner was accompanied by a force under Major English, which returned immediately to Hazareebagh. Most of the records of Chota Nagpore were destroyed by the rebels, but the public buildings sustained but little damage. The amount plundered from the Lohardugga treasury was :—

			Rupces.	Annas.	Pie.
In cash,	...	...	1,35,439	13	10
Salaries of Government servants in					
the Mofussil,	...	..	247	0	0
Stamped papers,	...	...	25,997	0	0
Postage labels and envelopes,	...	...	611	0	0
Opium,	...	...		2 Mds.	10 Secrs.

Lieutenant Birch also reoccupied Chyebassa about the same time. The Porahaut Rajah "had promised to go into Chyebassa and deliver up to Lieutenant Birch the mutineers who had taken service under him, and the Government treasure which they had plundered; but there was reason to believe that these promises were not sincere, and Lieutenant Birch obtained information, on the 21st of September, that he was making preparations to attack Serai Killah."

About the end of October however the "Commissioner of Chota Nagpore reported that Urjoon Sing, Rajha of Porahaut, had at last delivered up to him the whole of the detachment of the Ramghur Light Infantry battalion that had mutinied at Chyebassa, together with the arms, ammunition and treasure he had taken from them, and that preparations were being made for sending him to Chyebassa for trial before the Senior Assistant Commissioner of Singbhoom for the offences charged against him." To assist Lieutenant Birch in restoring order, a wing of the Shckawattee battalion under Colonel Forster was despatched from Midnapore.

At Maunbhoom the conduct of the Zemindar of Pachete was in September highly unsatisfactory and the Commissioner thought that his apprehension and confinement would be but prudent. "Subsequently he was reported by the Commissioner to be arming his retainers, and making preparations for defence. It was ascertained, too, by the Magistrate of Rancegunge, that a number of workmen had been summoned from Calcutta to the residence of this zemindar at Kasseepore, and had taken advances for the manufacture of arms on his account. It had also been discovered by the Magistrate of Howrah, that some tents had been purchased for this zemindar, and orders given on his behalf for the manufacture of a considerable number of spear heads." He was subsequently apprehended by Colonel Forster and his estate attached.

The amount of treasure plundered at Maunbhoom was estimated in cash at Rs. 90,844. The plundering commenced by the mutineers was continued by bands of Sonthals who plundered in September Golab, Chutterpore and other villages of the Ramghur estate. Against these marauders Major

Simpson was sent with a party of Seikh police. He was successful in his operations and surprised Rengea Mangee's Sonthal village. A victory was also gained at Chuttra over the Ramghur mutineers by Major English on the 2nd October. He was then on his way to Hazareebaugh, where he eventually arrived in safety with the captured treasure, guns and ammunition. From Hazareebaugh he was ordered to proceed to Sherghotty en route to Cawnpore. When the troops under his command reached that station about the middle of October, Gya was threatened by an attack from the two companies of the 32nd who, as previously mentioned, had mutinied at Deoghur. The mutineers however proceeded towards the Soane to the South of the Grand Trunk Road. Notice was sent to Captain Rattray at Dehree and Major Simpson at Hazareebaugh was ordered to send to the former station all the Seikhs he could spare. Captain Rattray however did not succeed in overtaking the Deoghur mutineers who on the 24th October crossed the Soane. In the meanwhile "two other companies of the 32nd Regiment Native Infantry, which were on their march from Burhail to join the headquarters at Soorie, had mutinied. This detachment had got as far as Rampore Haut, where, on the 17th October, they suddenly made off, with the exception of ten men, who remained with their European officers. The direction they took, viâ Noni Haut, which they were reported to have plundered on the 21st, seemed to indicate an intention of following the same route as that taken by the 5th Irregulars and Deoghur detachment of their own regiment, and had it been found practicable to pursue them immediately, it is impossible that they should have escaped. Deeply sensible of the disastrous effects of these repeated progresses of unchecked mutineers, through one of our richest and most valuable districts, of the sufferings that must thereby be inflicted on the people, and of the humiliation to which the authority of Government was subjected by them, the Lieutenant Governor considered it his duty strongly to urge on the military authorities the necessity of making an effort to pursue and punish these rebels, and if it were at all possible to withdraw a party of sufficient strength from the troops hurrying up to Lucknow. In compliance with this requisition, two companies of Her Majesty's 13th Light Infantry and a detachment of the Yeomanry Cavalry were promised for this service on the 23rd October. Immediate preparations were made for supplying this force with carriage and supplies on the road, and Lieutenant Boddam, who was well acquainted with the country, was ordered to hold himself in readiness to accompany the party."

The Head Quarters of the 32nd reached Rancegunge on the

22nd October and of their own accord delivered up their arms to their Commanding officer.

Such was the position of the Patna, Bhaugulpore and Chota Nagpore Divisions during September and October. In Sumbulpore disturbances had been created by Soorunder Saice and his brother Oodunt Saice. The disturbances however never at any time reached any great height. Captain Leigh with some Madras sepoy being stationed at Sumbulpore.

From Eastern Bengal during the period under review troublesome reports of the state of the 73rd Native Infantry, of which there were two Companies at Dacca and the remainder at Julpigoric continued to reach the Lieutenant Governor of Bengal. On the 23rd October Khojeh Abdool Gunny wrote to the Commissioner of Dacca:—"I take the liberty of bringing to your notice, that a feeling of alarm prevails among the native community here, owing to the rumours in circulation that the two companies of the 73rd Regiment Native Infantry stationed here are dissatisfied, and that they have told people living near their lines, that a battle will shortly be fought between them and the sailors, advising them at the same time to remove their wives and families; this has already caused a partial panic, and several people have left the town in consequence. I believe that this feeling among the sepoy is chiefly caused by the budmashes of the town, who, in order to cause an outbreak, which they hope to turn to their own advantage, inflame their minds with reports that the seamen are preparing to disarm them. Whatever the real cause may be, it is certain that the sepoy are in an excited state, and that very little would cause an outbreak on their part, which might result in great destruction of life and property. It appears to me, however, that an easy remedy for this would be in removing these companies back to their headquarters. We all feel perfect confidence in the protection afforded by the sailors under Lieutenant Lewis, and satisfied that if these sepoy were once removed, the whole native community would feel extremely grateful to Government, and be able to pursue their several vocations in peace and quietness. This order would also no doubt, give pleasure to the sepoy themselves, as they have always expressed a great wish to leave Dacca."

The Magistrate, Mr. Carnac also wrote on the 25th October to the Government of Bengal that he had heard from a source which had never yet failed him of the mutinous state of the sepoy at Dacca. There were also alarming reports from Assam and at the urgent report of the Lieutenant Governor a body of seamen were despatched for service in that province. The Brigade arrived at Debrooghur on the 2nd October. Two hundred

and fifty European seamen were also entertained about the beginning of November for service at Purneah, Dinagepore and Rungpore.

In addition to sending these seamen for the protection of Eastern Bengal and Assam, the Lieutenant Governor of Bengal organised a department for the carriage of troops between Raneegunge and Benares. On the 10th of September, Mr. Ward, was appointed Superintendent of Carriage and Supplies. By the 25th, he notified to the Bengal Government that he had collected carts and was ready to commence storing provisions along the Grand Trunk Road. This however he could not do until he had certain officers appointed as store-keepers. Twelve officers were accordingly placed at his disposal. They had all joined by the 6th October with the exception of two. At Raneegunge however no efficient provision had been made for the reception of troops, and the Commissioner of Burdwan reported that "when the detachment of Her Majesty's 35th Regiment arrived at Raneegunge, the men had to spread their bedding on the floor of the godowns allotted to them as barracks, till the Joint Magistrate of Raneegunge supplied them with thick bamboo mats, which the Commissariat officer present said he had no authority to furnish, and that even these proving insufficient, he (the Commissioner) at last supplied them with thirty-six or thirty-seven cots at Mr. Ward's request."

On the 19th October, Lieutenant Colonel A. Hope reported on the arrangements carried out by Mr. Ward. He remarked that the sheds on the road were generally insufficient to contain eighty men. At one station there was represented to be no shed whatever. Charpoys were required at all the stations. There were no soldier's camp privies. Lieutenant Colonel Adrian Hope, however, believed that "most of these defects, trivial as they are, were about to be remedied."

On the 30th September, Mr. Solano, a planter in Behar volunteered to raise a force of 300 picked sowars. The Government were to appoint officers to the command of the sowars. Each sowar was to receive Rs. 20 a month. The Lieutenant Governor of Bengal in his minute on Mr. Solano's proposition says:—"But though it is very necessary to make a strenuous effort to defend the valuable and important districts of the Behar Province, and to reduce to order those parts of them which are now in disorder, and for this purpose it is obvious that reliance must be had entirely upon local resources, since circumstances prevent the possibility of military aid, I am decidedly of opinion that it would be inexpedient to accede to Mr. Solano's proposition, for reasons which I will not here state at length, but which

I have verbally submitted to the Governor-General, and which will be sufficiently understood by all, whether European or native, who are acquainted with that part of the country in which Mr. Solano has carried on his business for the last eighteen or twenty years, and with the character which is generally attributed to him in that neighbourhood and even much beyond it."

But the Lieutenant Governor of Bengal thought that a force should be speedily organised for the restoration of order in the Behar and Shahabad districts. He therefore proposed "with the concurrence and approval of the Governor-General in Council, to instruct Mr. Samuells, the Commissioner of Patna, to lose no time, with the aid of Major Nation, commanding the Nujcebs, or Patna Station Guards, in bringing that body into an organization resembling that of Captain Hattray's police corps, and to officer it in a similar manner. The Nujcebs had not all behaved alike during the past troubles. Some of them, as at Gya, joined the rebels and plunderers, and fired upon the English officers; some showed hesitation and a doubtful allegiance; but the far larger part had behaved loyally and gallantly; and it is probable that where they have failed, it has been greatly owing to defective organization, too long service in one part of the country, and above all to the want of English officers, there being only one in the whole corps." The reorganisation of the station guards was sanctioned by the Supreme Government.

Besides attempting to raise forces for the defence of the endangered districts of Bengal Mr. Halliday attempted to gain the affections of the people. Thus in the narrative for the week ending the 3rd October transmitted to the Honourable Court of Directors it is recorded. "The Lieutenant-Governor had received from a zemindar a document, purporting to be a copy of a perwannah issued by the Collectorate of a district, requiring all zemindars to furnish returns of the number of bullocks procurable for slaughter, with a remonstrance against its tenor and purport; and on inquiry it was ascertained that the issue of perwannahs of this character had originated in a requisition from the Commissariat Department, and that all the Executive Commissariat Officers had been directed, by a circular from the Commissary-General's Office, to make the same inquiry through the local Civil authorities of the several districts of their division.

"Requisitions of this sort are so opposed to the religious prejudices of the Hindoos, that had the Lieutenant-Governor or the higher civil authorities been aware of what was proposed to be done, such objectionable perwannahs would never have been issued, and the information required could have been obtained by other means."

Previous to this Moonshee Ameer Ali had been appointed Assistant to the Commissioner of the Patna Division. On the 17th October, it was notified to the Government of India, that the Assistant to the Commissioner had been permitted to resign his post and a memorandum drawn up by Mr. Samuells placing the facts connected with the appointment on record and submitting a few observations on the tone assumed by the public press towards the Mahomedan community was forwarded. The following extract from Mr. Samuells's memorandum exhibits the services rendered by Moonshee Ameer Ali :—

“On the 5th of August I was informed that my services were required in my present appointment, and that I must be prepared to start on the 7th. On the 6th, Moonshec Ameer Ali and other pleaders of the Sudder Court called to bid me good-bye, and the Moonshee, after mentioning that he had written to his friends and clients in Behar urging them to stand by the Government, and to afford me their support, added that if I thought his personal services could be of any use he would willingly make arrangements for the conduct of his business with his brother pleaders and accompany me to Patna. At this time, it will be recollected, affairs in Behar wore a very gloomy aspect; Major Eyre's victory was not known, and it was believed that in consequence of Koer Sing's rebellion and Mr. Tayler's order for the withdrawal of the civilians from the out-stations I should find the entire province of Behar more or less in a state of anarchy. The troops available for the restoration of order were few in number, and the task of keeping the great zemindars true to their allegiance, and preserving the peace of the country through their agency was clearly likely to be one of no common difficulty.

“This being the state of affairs, it occurred to me that a shrewd intelligent man like Moonshec Ameer Ali, intimately acquainted with the private history of every family in Behar, and able to point out the secret springs which were likely to influence them; might be of great service, and I therefore told him that I thought if he was serious in his offer and would repeat it to the Lieutenant-Governor, that it would be cordially accepted. He accordingly waited upon the Lieutenant-Governor, who took a similar view of the case to myself, and Moonshec Ameer Ali was appointed Special Assistant to the Commissioner on a salary of 700 rupees a month, it being understood that his appointment should cease at the conclusion of the Dusserah holidays. It was absolutely necessary that he should be accredited by the bestowal of an appointment, because it was my intention to employ him principally in communicating with the principal zemindars in the division, but I need hardly observe,

that the appointment he received bestowed on him no power whatever, and only that degree of influence which it was necessary he should possess to be of any use in furthering the objects of my mission.

"On my arrival at Patna, I found that Major Eyre's victories at Arrah and Jugdespore, and the speedy return of the civilians to their stations, coupled with the exemplary behaviour of the people in the districts of Chupra and Tirhoot had preserved the province from any serious disorder, and that there was not that occasion for Ameer Ali's services in the interior of the division which I had anticipated. His assistance was however most useful to me during the Mohurram. By my desire he assembled the inhabitants of the different Muhallahs in rotation, and explained to them, according to a programme I had previously given him, the precise position of affairs, and the power and resources of the British Government, answering all their questions, satisfying their doubts, and confirming their confidence in the stability of the British rule. He explained to them at the same time the rules I had laid down for their guidance during the Mohurram, and the necessity of carefully avoiding every demonstration which might lead to a breach of the peace. He attended at the Durgah on the great day of the Mohurram, and superintended all the police arrangements at that spot in person, and it was undoubtedly owing in a great measure to his exertions that the Mohurram, which had been looked forward to with dread by so many persons, passed off more quietly than it had ever been known to pass before in the city of Patna, and this without any coercion of the people, or any display of military force.

"Since that period Moonshee Ameer Ali has been occupied in conducting the extensive correspondence which I have had with native zemindars and others on affairs connected with the disturbed state of the country, and in acquiring information for me on the state of feeling among the natives in all parts of my jurisdiction. In all this his zeal, tact, and intelligence have been conspicuous, and I should be most unjust if I did not acknowledge in the fullest manner the assistance which I have derived from him in this department of my duties."

On the 7th November, a statement of arms sold in Calcutta and Monghyr was forwarded to the Governor General. The Lieutenant Governor of Bengal in submitting the statement remarks:—"It does not I am afraid approximate even to the actual number of arms sold." In Calcutta, there were sold 1,619 fire arms and 1,178 swords. The returns from Monghyr were still more insignificant.

The papers now summarised contain also an Act, which received

the assent of the Governor General on 11th September, 1857 for regulating the importation, manufacture and sale of arms and ammunition, and for regulating the right to keep or use the same. For carrying this Act into law the following propositions were made by the Lieutenant Governor of Bengal :—

“Subject to the approval of the Government of India, the Lieutenant-Governor proposes to put into force, on and after the 1st October next, within all the territory subject to his authority, the last thirty sections of the Act, from section 7 to section 36, both included.

“He proposes to constitute the Commissioner of Police, in Calcutta, licensing officer for Calcutta, under section 8, the licenses to be subject to certain conditions.

“He proposes under section 15 to prohibit the transport in any direction, by any person or persons not acting on behalf of Government, of arms, ammunition, military stores and sulphur, and the transport by any such persons of saltpetre, except towards Calcutta, for sale or storage or shipment there; the above prohibitions being made subject to exception in favour of persons licensed to transport such articles by any officer empowered to grant licenses under section 8.

“With respect to the issue of orders regarding the sale or possession of sulphur, under sections 18 to 22 inclusive, the Lieutenant Governor proposes to guide himself by such information as he may receive in reply to a call made on the Executive Officers in Calcutta and the Mofussil.

“Regarding the method of enforcing the earlier sections of the Act, the Lieutenant Governor is desirous of soliciting particular instructions.

“These sections of the Act seem not intended or expected to be at once put in force over all the territories subject to the British Indian Government, or even apparently over any large portion of them; but ‘in any district or place’ in which it shall seem to the Executive Government requisite to enforce their provisions.

“This precautionary form was, doubtless, adopted because of the unavoidable irksomeness and serious liability to penalty, with which, the provisions of the sections in question, must necessarily affect all persons subject to them. For, all persons in districts and places to which these sections may be extended, must give notice in writing within one week of the promulgation of the order, of all arms and all such deadly weapons named in the order as may be in their possession or on their premises in the possession of servants or retainers, and this may include the universal *lathee* of the Behar districts, and will certainly include the all-but universal tulwar, and the

order may, and probably will, concern districts where very few persons can read and write.

"A further written notice must also be given in case any such arm should, subsequently to the first notice, come into a person's possession, or into the possession of any of his servants or retainers, and any wilful neglect to give these notices, is to be punishable by a fine extending to 500 rupees.

"It is needless to remark that this, like all penal laws in this country, will be taken advantage of by enemies and informers to oppress and annoy for evil purposes.

"Further, in all districts, to which these sections may be extended, any person going armed may be stopped by 'any Magistrate, Deputy-Magistrate, or Assistant to a Magistrate, or by any European Commissioned Officer in the service of Her Majesty, or of the East India Company, or by any member of a Volunteer Corps, enrolled by authority of Government, while on duty, or by any Police Officer;' and may be called in question touching his right to carry arms in the district, on a journey or otherwise, and may be put to his 'reasonable proof' of exemption from the provisions of the law, if he be exempted, or must produce a license or certificate from a Magistrate or other officer authorized to grant licenses to go armed, and failing these, may be disarmed by the Police Officer, or other functionary as above described.

"All this, it is clear, may be the occasion of much hindrance and vexation, and may unavoidably sometimes so operate, as to inflict offence or degradation, or what will reasonably seem offence or degradation, to some of the persons concerned; besides that, it can hardly fail to be used, more or less in many cases, as an engine of extortion.

"So that it would be reasonable to suppose beforehand, what appears to be the purpose of the legislature, namely, that the provisions of the sections in question, ought not to be of general and universal application, but should be enforced only at particular times and places, upon special cause then and there apprehended, or having arisen.

"The special cause, it is obvious, could only be the occurrence or expectation of insurrection, and the consequent evil use of arms, to the detriment of the public peace. And on such occasions calling for the enforcement of these necessarily irksome and troublesome, and possibly offensive provisions, it would seem—so the Lieutenant-Governor has come to look upon it—as if this irksomeness and possible degradation and offence ought not to be imposed indiscriminately upon all, whether good subjects, or bad, but only upon the bad, or those likely to turn out bad subjects, upon an opportunity offering.

"To this it may be answered that it is impossible to say with certainty, or even strong probability, beforehand, who will, in the case apprehended, prove themselves to be good, and who bad subjects; and that all must, therefore, be subjected to an inconvenience, which, if it prevent and tend to subdue insurrection, must in the end prove beneficial to the good by counteracting the aims of the bad. And this, no doubt, the Lieutenant-Governor must admit, is true, so far as it applies, that is to say, so far as the impossibility or strong incertitude of discrimination between the well disposed and evil disposed may really exist.

"But in the present circumstances of the country, there may be some broad obvious distinctions of classes, as to the discrimination of which no real difficulty could possibly exist; and this, it appears to the Lieutenant-Governor, is the case with the class of European British subjects, and the descendants of such subjects commonly called East Indians, or Eurasians, and European Foreigners, of whom it is certain that they will be found, in case of such insurrection as has unhappily occurred in parts of the British Indian Territory, on the side of order and not of rebellion, and carrying arms for self-defence and the repression of outrage, and not on the side of treason; and as these classes can easily be described, and every person belonging to them must carry in his visage and outward appearance, reasonable proof of the qualifications which cause his exemption, it would seem, as the Lieutenant-Governor desires respectfully to submit, that no argument can be raised by which to justify the omission to exempt them in case of the extension of the sections in question to any district or place. For, the grievances occasioned by the law, however slight they may be, are, the Lieutenant-Governor would submit, pure evil, except so far as they may be necessarily imposed for the sake of the public good; and in the case of these classes, who cannot be insurrectionary in the present instance, but, on the contrary, are always the objects of murderous attack, by rebels and mutineers, and who may always be easily distinguished from any other classes, it appears in no way necessary for the public good to impose upon them (whatever may be the necessity in the case of others), any of the grievances belonging to the law in question; but on the contrary, it would rather seem for the benefit of peace and good order, and the prevention or repression of outrage and rebellion, that these classes, capable of such easy distinction, should be always exempted from any irksomeness or grievance in carrying arms, and rather encouraged so to do, than the contrary.

"For these reasons I am directed to submit the intention of the Lieutenant-Governor, in case he should have occasion to put in force in any district or place, the provisions of sections 1 to

6 inclusive, of the Act in question, invariably, under the power given him by section 6 to except 'European British subjects and persons commonly known as East Indians, or Eurasians and European foreigners,' unless he shall be otherwise instructed by the Governor General in Council.

"Undoubtedly, I am directed to add, there may be other persons and classes whom it will be proper to exempt from the operation of the sections in question, such as zemindars like the Rajahs of Bettia and Hutwa, and Suraikhela and Ramghur, and Raja Jye Mungul Sing, and the incumbent of Sasseram Shah Kubeer-ood-deen, and also their retainers and followers, and many other such loyal and well-disposed persons of various degrees, who have, in different parts of the country, vied with our own countrymen in courage and good faith, and in exertions for the support of the Government. Some of these will obviously come to mind in case the sections should be extended to their parts of the country, and others will be suggested by the local authorities, to whom the Lieutenant-Governor proposes to make a reference for that purpose.

"In order to prevent any vexation or difficulty arising out of that section which requires persons, not having other 'reasonable proof' of exemption, to produce a certificate of exemption from a Magistrate or other authorized officer, the Lieutenant-Governor proposes to supply the local officers with printed forms of such certificates, and to direct them to furnish one free of all cost, and without awaiting application for it, to every exempted person, not of the class of European British subject, or European Foreigner, or Eurasian. These classes will not need certificates, their appearance being always 'reasonable proof.'

"Submitting then these observations upon the law and the manner of enforcing it, the Lieutenant-Governor will await the directions of the Governor-General in Council, and be prepared to act as he may be instructed."

They mostly received the assent of the Governor General but it was not thought advisable that Europeans should be exempted from the clause prohibiting the possession of arms without a certificate from some authorized officer.

On the 5th October, 1857 a petition from the Christian inhabitants of Calcutta was forwarded to the Secretary to the Government of India praying the Governor General in Council to exempt the Christian inhabitants of Bengal from the operations of the "Arms' Act." The petition was refused. The reply of the Governor General is to be found amongst these papers.

On the 5th November, Mr. Fergusson writes to the Lieutenant Governor of Bengal:—"In the month of September last, 108 men and 6 officers of Her Majesty's 59th Regiment were

stationed in the Army Clothing Offices as a guard over the Alipore jail, which is in the immediate vicinity of those offices. These Europeans continued to guard the jail till yesterday morning, when they were withdrawn, and instead of them only six men and one Sergeant of Her Majesty's 54th Regiment have been placed at the jail. The seven men are absolutely the only armed guard I have over 1,725 convicts, of whom several are mutinous sepoys and sowars from Berhampore, Jelpigorie, Barrackpore, and other stations; nearly the whole of the remainder being convicts sent from other jails, because they are so desperate and dangerous that it was found unsafe to confine them in any less strongly guarded prison than that at Alipore has hitherto been. But besides being a guard over 1,725 of the most dangerous characters in Bengal, these seven Europeans have to keep in check the whole Alipore militia, and more directly eighty-six men of that regiment who are stationed within a few yards of the jail-gate, and some of whom are known to have friends imprisoned in the jail. I may add that I am in daily expectation of receiving from Patna and other stations, considerable numbers of life-prisoners, among whom are more sepoys and sowars. The militia sepoys being from the same villages, are nearly certain to have friends among these convicts also, with whom they naturally sympathize, and whose escape they would, therefore, in all probability assist. I consider it my duty thus prominently to allude to the militia, because I have been lately informed that when the men of Her Majesty's 59th were sent to guard the jail, some militia sepoys were heard openly boasting that their regiment, even without arms, was more than a match for such a small number of Europeans." The Supreme Government accordingly on the 9th November, removed to the Army Clothing Offices for the protection of the Alipore jail a detachment of H. M's. 54th.

On the 20th November, the following rules for securing the interests of Government against injury from the use of stamped paper plundered during the late disturbances were issued :—

"1st. All stamped paper now in the hands of vendors or in the mofussil treasuries to be authenticated by the signature of some one responsible officer in each district, the date of signing being also affixed.

"2nd. All stamped paper already prepared, and hereafter supplied from the office of Superintendent of Stamps, either to be authenticated by the signature of the Superintendent or to bear a distinguishing mark in addition to the bi-color stamp and the treasury counter-stamp.

"3rd. All fresh stamped paper prepared in future to bear a distinguishing mark.

"4th. A reward of 15 per cent. to be paid on the value of all plundered stamped paper recovered and brought in an undamaged state to any mofussil treasury.

"5th. All unauthenticated stamped papers in the possession of private individuals to be called in by a certain date, fixed according to circumstances in each district, but not more than one month from the date of notice. Authenticated stamped paper of equal value to be given for all unauthenticated paper of which the owners can show to the satisfaction of the Collector that it was honestly obtained from the Government and paid for. All other unauthenticated stamped paper to be confiscated.

"6th. No document of later date than that fixed under the preceding Rule to be valid for any purpose whatever unless written on stamped paper authenticated as above provided.

"7th. The possession of plundered stamped paper, or postage labels, of which a satisfactory account cannot be given, to be punished with the utmost rigour, besides being regarded as evidence of rebellion."

The Chamber of Commerce on the 30th November begged that his Lordship in Council would be pleased to comply with the request of the merchants and residents at Akyab and provide a protection for that port greater than it then possessed. They were informed by the Governor-General that he could not at present comply with the request of the applicants.

The Governor General kept the Directors informed of the proceedings of the rebels and with the efforts made to restore order in the Central and North-Western Provinces. The letters written by the Governor-General are dated from Fort William between November and December and relate to matters that had occurred so far back as August. The inclosures are the history of the Central and North-Western provinces to the beginning of November only.

In September Mr. Read made over the charge of the Government of the North-Western Provinces to Colonel Fraser, the Governor-General explaining that his object in placing a military officer at the head of the Local Administration was to combine the chief Civil and Military power in the same hands. "Under the altered state of affairs at Agra, the Indore force having been dispersed, and Agra being no longer immediately threatened, the Chief Commissioner, Colonel Fraser, ordered the pursuing column from Delhi, under Colonel Greathed, to march direct on Cawnpore, for the purpose of reinforcing Brigadier Havelock's army at Lucknow. In issuing these instructions, however, Colonel Fraser wished it to be clearly understood, 'that the moment spare troops were available at Cawnpore, in consequence of the arrival of soldiers from below, a

portion of Colonel Greathed's column, or others in their stead, should be sent, without loss of time, to Agra,' where there were then only a weak European Regiment of Infantry, and a Horse Artillery Battery. Colonel Fraser also thought it proper to direct that Colonel Greathed should leave 200 of his Sikh Cavalry behind at Agra, as their services were greatly needed there.

"Meanwhile, the Governor-General had sent a telegraphic message, on the 19th October, to the officer commanding at Cawnpore, requesting that he would inform Colonel Fraser that the presence of Colonel Greathed's column was urgently required in Oude, and that the cavalry attached to that force was especially needed."

In compliance with the suggestion of the Chief-Commissioner the Governor General sanctioned the raising of a corps of Jat horse four hundred strong, to maintain order in Allyghur and the adjacent districts. The Jat horse were eventually to be amalgamated with the Seikh horse. To the defence of the Azimghur frontier Lieutenant Colonel Longden with ten guns had been ordered to proceed.

On the 28th of November Mr. Samuells strongly advised the reoccupation of Goruckpore. Troops could not immediately be spared for that duty but it was represented that the Nepal Brigade would be directed to proceed against Mahommed Hossein who had assumed the title of Nazim of Goruckpore. The abandonment of that district had been effected under peculiar circumstances. These circumstances are explained in the following letter dated August the 24th by Mr. H. C. Tucker, the Commissioner of Benares :—" His Honor will have learnt from my letter of the 21st August, that the Governor-General in Council authorised Mr. Wingfield, by orders of the 11th instant, to retire upon Azimghur, with all the Civil and Military officers of Goruckpore, and the Goorkhas, should it be found impossible to divide the Goorkha force into two portions, one of which should remain at Goruckpore, while the other and stronger division should move on to Azimghur.

"The Goorkha Commander positively refused to split his force unless a company of Europeans, and two guns, were sent to reinforce the Azimghur detachment. As this could not be done, the force could not be divided, and the officials were authorized, under the letter of the Governor-General's instructions, in abandoning Goruckpore, and falling back on Azimghur.

"I have already stated how strongly I disapproved of the abandonment of Goruckpore, at the time it was made, when there was no hope of the sacrifice of the district bringing any proportional benefit to General Havelock and Lucknow, as

would have been the case had the healthy portion of the Goorkhas been rapidly pushed forward to Allahabad, as urged in my letters to Mr. Wynyard, and my address to the Supreme Government of the 5th instant. Messrs. Wynyard and Paterson have committed, in my opinion, an error of judgment; but, as they are borne out so far by the instructions of Government, I trust His Honor may be pleased to modify the fifth paragraph of the letter under acknowledgment. Mr. Paterson has already left for Calcutta, in anticipation of leave on sick certificate, which is separately transmitted. Mr. Wynyard is at his post, and though I have considered myself bound in duty, both to him and to Government, to transmit a copy of your letter to him, I have requested him to stand fast, and administer the civil duties of Azimghur and the Goorkha camp, until I receive the orders of Government upon this letter, and my address of the 21st instant.

"I regret that I should have incurred the censure of His Honor for having, on the 5th August urged the pushing forward, sharp, of the whole healthy Goorkha force, even at the sacrifice of Goruckpore. Lucknow was known to be in great danger; Havelock's army was obliged to retreat; and I judged that a speedy reinforcement of 2,500 good troops was worth the sacrifice of a district. I reported, at the time, to the Supreme Government, who made no objection, but simply transmitted, for my information, copy of the orders in the Political Department of the 11th August. I acted on the principle carried out by Government, with reference to the Europeans, of sacrificing districts as a minor consideration, when compared with the necessity for sending every available man to the main scene of action. It was on this principle that Azimghur and Jounpore were relinquished, when 100 Europeans to each would have retained them. I therefore acted on the analogy of the Government proceedings.

"Besides, it was by no means clear what really were the orders of Government, there have been so many contradictory orders regarding these Goorkhas. At one time they were to march straight to Lucknow via Fyzabad, without turning to the right hand or to the left; then they were to be split into small detachments at Goruckpore, Azimghur, and Jounpore, with two regiments to join the Europeans at Allahabad; then they were to garrison only Goruckpore and Azimghur; now they are to be massed on Azimghur alone. In the absence of any definite policy regarding these Goorkhas, I considered I was only carrying out the general principle of the Government, in urging their being hurried forward to the relief of Havelock and Lucknow, without regard to minor considerations. At the

same time I suggested to Mr. Wynyard, 'I cannot direct you, or any other official, to remain in charge of a district thus denuded of troops. But perhaps there may be found some officer with the spirit of a Venables, who will volunteer to keep charge of the station, and of as much as possible of the district, with the faithful Irregular Cavalry, and the 200 Goorkha Irregulars from Palpa, strengthened by as many more as can be obtained from Nepal, and such Irregular force as can be raised with the assistance of the faithful Rajahs and Talookdars. If any officer feels that he can keep the district together in this way, he will be effecting a very important object.' I also proposed that a general hospital for the Goorkhas should be established at Azimghur, in the entrenchment; the troops left to defend which, would have been sufficient to enable Mr. Venables to return to the station.

"Now, however, that the Lieutenant-Governor is on the spot, I shall be careful to observe myself, and to enjoin upon all my subordinates, the rules of implicit obedience to the latest order of Government."

The letter was thus replied to through the Secretary to Government, Central Provinces:—"I am directed by the Governor General in Council to acknowledge the receipt of your letter, and its inclosures, relative to the abandonment of the district of Goruckpore by the Civil officers.

"The proceedings of the Lieutenant Governor, as reported in these papers, are approved, and it only remains for his Lordship in Council to notice the letter addressed to you on the 24th of August, by Mr. Tucker, the Commissioner of Benares, which, both in tone and substance, is open to much objection.

"Mr. Tucker states, that the 'Goorkha Commander positively refused to split his force unless a company of Europeans and two guns were sent to re-inforce the Azimghur detachment.' From the papers in the possession of the Government it does not appear that the Goorkha Commander ever positively refused to divide his force, or even, in objecting to it, insisted upon the condition mentioned by Mr. Tucker. Both Mr. Wingfield and Captain Wroughton thought it would not be 'fair to the Nepalese troops to detach two regiments unsupported by guns, Cavalry, or Europeans, to Azimghur, as that district lies so exposed to incursions from Oude, whence numberless guns, many of heavy calibre, can be brought against them;' but no such condition was urged by the Goorkha Commander, and the abandonment of the district cannot, therefore, be justified on this ground, even supposing that the conditional instructions of the Government of India dated the 11th of August had been received before the abandonment took place, which is not the case.

"Mr. Tucker adverts to the several orders of the Government of India in regard to the disposal of the Goorkhas, as if they had been dictated without purpose and by no sufficient reasons, and he omits all allusion to the intermediate change of circumstances in Oude. He truly states, that in the first instance the Goorkhas were directed to march to Lucknow, via Fyzabad, and that afterwards they were directed to guard the Oude frontier, first in an extended line from Goruckpore to Allahabad; then in more concentrated force at Goruckpore and Azimghur; and lastly, if Goruckpore should be abandoned, at Azimghur alone. But how these orders, the object of which is apparent, and the last of which was not issued before the 11th of August, could have been supposed by Mr. Tucker to justify him in ordering the whole force to Allahabad on the 5th of August, to co-operate with General Havelock at Lucknow, an order which, under any circumstances, he was not competent to give, is altogether incomprehensible. The Governor-General in Council entirely concurs with the Lieutenant-Governor in condemning Mr. Tucker's conduct on this occasion.

"Of Mr. Tucker's presumptuous attempt to charge the Government with giving contradictory orders, and then to make these supposed contradictory orders a justification of his own unauthorized act; of the insinuation conveyed in the last paragraph; and, generally, of the whole tone and tenor of his letter,—the Governor-General in Council will only observe, that they are extremely reprehensible, and such as his Lordship in Council could not have expected from an officer of Mr. Tucker's position and character."

On the 23rd November, the Governor General mentioned that he had desired the Chief Commissioner of the North-Western Provinces to submit with "a full expression of his views on the subject, a report of the proceedings which have taken place in the city of Delhi since its occupation by the army under Brigadier General Wilson, and of the policy that has been pursued towards the city and its inhabitants."

In the same letter, the Governor General also forwarded narratives of the Cawnpore and Futtehghur massacres and of the mutiny at Orai and the loss of the Jaloun district. The papers contain two narratives of the Cawnpore Massacre, both are too long for insertion here. One of the narratives was written by a native gentleman of Cawnpore. There is also an account of the mutiny of the Kotah Contingent.

In the next despatch dated the 10th of December mention is made of the appointment of Mr. C. J. Wilson, of the Civil Service, to be Special Commissioner to trace and bring to punishment those who had been guilty of the crimes of mutiny or rebellion, or

had incited others to the commission of these crimes. A memorandum from Mr. Muir was also submitted laying down rules for the guidance of Civil officers on the re-introduction of the Revenue Administration into the disturbed districts. The principle laid down was "that all native officials should be called back to their posts, 'if they vacated them in consequence of the attack of insurgents, and subsequently displayed no treasonable or suspicious conduct;' that 'they should be maintained in office wherever they have managed to hold on without compromising their faithfulness to our Government,' and that, in fact, 'wherever our officers had gone to their homes with unblemished reputation, they should, if practicable, be called back.'"

Mr. Grant considered that too much was conceded by this rule. The Lieutenant Governor therefore expressed a strong opinion "that no native official, high or low, who has disappeared during the crisis, should be reinstated in his vacant office, unless he can show to the complete satisfaction of his European superior that he exerted himself to the utmost of his power to support his Government, and to protect European life, or that his not appearing openly on the side of the British Government, arose from circumstances really beyond his control."

The Governor General concurred in the principle enunciated by Mr. Grant, and directed that it should be acted upon throughout the North-Western and Central Provinces, and the Non-regulation tracts under his own administration.

The narratives of events that occurred during September, and the early part of October contains no other facts at this time of interest. Sangor and Nagpore were in a critical position, and on the 21st September owing to mutiny of the 52nd Native Infantry at Jubbulpore it was found necessary to abandon Dumoh. The Kamptee moveable column loaded with treasure after having disarmed a detachment of the 52nd N. I. left Dumoh on the 21st. On the 27th they met and attacked the mutincers of the 52nd Native Infantry who had been joined by upwards of one thousand matchlockmen. Colonel Millar obtained a decisive victory and this success removed all immediate danger from Sangor.

The Parliamentary papers further contain the correspondence that passed between the Lord Mayor of London, the Calcutta Relief Committee, and the Governor-General on the subject of the appropriation of the sums subscribed in England for the aid of sufferers by the Indian mutinies. The correspondence is unimportant save that it establishes the entire control of the Calcutta Committee over the funds.

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EDITED BY
MEREDITH TOWNSEND.

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ADVERTISEMENT.

THE Governments of India publish on an average a volume every four days. From reports affecting the entire empire to accounts of local drainage, from the opinions of the ablest officers to the cost of a cutcha bye-road in a frontier province, every thing finds a place in these publications. There is scarcely a subject connected with Indian administration on which they do not exhaust official knowledge. There is no officer in the country who may not obtain from them, in reference to his special task, all the advantages of experience. The information thus vast is, however, widely scattered. The records of one presidency are scarcely known in another. The books are not very readily procurable, and above all they are like all other blue books dry, indigested, and overlaid with detail. It costs an hour to find a fact, and in India men who care about facts cannot spare hours.

The object of the compiler is to remove this defect, to do for the official information of India what Mr. Leone Levi is doing for the blue books of England. The Annals will comprise every fact, and almost every opinion of importance in the records of the quarter. A copious Index will enable the reader instantly to refer to the subject of which he is in search, and any peculiarity of opinion and even of style is carefully retained.

A word may be necessary on the arrangement adopted. It is intended that the most important subject should have the largest space, but in estimating the relative importance of the records the compiler has been compelled to rely on his own judgment. Usually all subjects of imperial interest have the preference, statistics occupy the next place, and subjects purely historical the last. They are not very important, and not at all interesting, but they can only be condensed to a certain point.

THE
ANNALS
OF
INDIAN ADMINISTRATION.

THOMASON'S OPINIONS.

Records of the North-West Provinces.

A COLLECTION of Mr. Thomason's minutes and despatches has been published by the Government of the North-West Provinces. They are contained in two volumes, are upon the most varied subjects and were selected by Mr. Thomason for private use and reference. In a preface to this collection Mr. Muir, late Secretary to the Government, North-West Provinces, observes that the publication of these despatches will be an important general benefit as conveying an authentic exposition of the principles on which existing rules and institutions have been established, and as a permanent source of information and aid in the future course of public measures.

Cutting Trees for Elephants.—Under native governments a general and undefined right of grazing public cattle on private property was exercised and submitted to. But it has been the constant aim of the British Government to put a stop to practices of that sort. The gratuitous supply of Rusud, the Sirkaree Nirruick or reduced price to Government officers, the pressing of Begarees have been disclaimed. This right to gratuitous forage is of a similar nature, and must be similarly renounced. All trees, grass, and forage within the limits of a village are private property, unless on the borders of public roads and thoroughfares.

Pressing Artizans.—The intervention of the Magistrate to compel tradesmen and artisans to accompany a camp, is improperly required. The invitation of the Commissariat officer should be sufficient. When not sufficient, the tradesmen and artisans should be further encouraged.

Pressing Laborers.—The difficulties experienced to obtain sufficient laborers when extensive works are to be carried out in a thinly populated country, are difficulties arising out of the nature of things, which arbitrary orders, or illegal compulsion will not remedy. The true and effectual remedy is to exhibit kindness, consideration and thoughtfulness with all laborers on the spot, and to invite laborers from a distance.

Tonnage Charges.—The rates of boat hire in the schedule of the Military Board are not the market rates, but generally below them. They should therefore be revised, for their continuance necessitates the seizure of boats. The Commissariat should never apply to the Magistrate. His interference at all regarding prices is to be deprecated, but it is sometimes unavoidable. A careful Magistrate will see therefore that his table of rates corresponds with the market prices, is in fact a price current.

Supply of Grass to the Cavalry.—The present custom is for the Cavalry to entertain grasscutters, who with their ponies go and cut grass where they can, without making any payment for it. The custom leads to collision with the cultivators, is the constant source of annoyance and irritation, and violence and ill-blood is occasioned in all ranks of society. In cantonments, a remedy may be found in bargaining with the zemindars; on a march the difficulty may be greater, but the evil is less.

Compulsory Attendance of the Bunneeahs.—The custom of compelling the attendance of Bunneeahs at cantonments is contrary to law. It is the duty of all Magistrates to set their face against the practice. The proper mode in which to effect their attendance is to make arrangements with one or more Bunneeahs to attend voluntarily.

Sunday Labor Prohibited.—The rule of the Bombay Government prohibiting the prosecution of public works on Sunday is a right one, and should be universally observed. In the introduction of any change of this sort, every effort must be made to avoid compulsion.

Talookdaree Tenures.—"A Talooka, is a large estate, consisting of many villages (Mouzahs) or, as they would be called in English, parishes.

"These villages had originally separate proprietors, who paid their revenue direct to the Government Treasury.

"The Government in former times made over by patent, to a person called the Talookdar, its right over these villages, holding him responsible for the whole revenue, and allowing him a

certain percentage, with other privileges, to compensate him for the risk and labor of collection.

"The wealth and influence thus acquired by the Talookdar often made him in fact independent; so long as he paid regularly the sum demanded from him, he was allowed to manage the estate as he pleased. Provision was not made for protecting the rights of the village proprietors, though no one questioned the existence and inviolability of those rights.

"When the country came under British rule, engagements for payment of the Government Revenue were taken from these Talookdars, and they were called Zemindars, no notice being taken of the village proprietors."

The Talookdars immediately proceeded to oust the village proprietors by means of the Court of law. In future therefore it has been determined to admit the village proprietors or Biswahdars to engagements, and give the Talookdar his allowance from the Government Treasury. The allowance will be twenty-two and half per cent. out of the sum collected by Government from the Talooka. The payment to the Talookdar, however, is never to fall below one-tenth of the total demand of Government. There are grounds to believe that this course of proceeding will remove much of the existing uncertainty regarding tenures, and go far towards giving security of title.

Customs' Administration.—The cost of the establishment provisionally sanctioned for the collection of customs in the Delhi and Mirzapore districts was Rs. 5,38,718-4 per annum. The gross collections from all dutiable articles from 1834 to 1843 inclusive was Rs. 48,45,666. The charges during the same period amounted to Rs. 6,45,266, the nett receipts were therefore Rs. 42,00,399. In 1836-37 the frontier line system came into operation and in 1843-44 the provisions of Act XIV. 1843. Under neither system was there any loss of revenue. The customs are levied on salt, cotton, sugar and miscellaneous. The great works for the production or manufacture of salt are in the Punjab, whence rock-salt is brought, in Rajpootana, where it is made in the great salt lakes at Sambur and Doodwanna, at Noh and Sooltanpore in the Delhi territory and in the Bhurtpore country on the Agra frontier. A uniform duty of two rupees is levied on all salt passing the North-Western frontier, and the sum of one rupee on all passing Eastward of Allahabad.* The Punjab* and Rajpootana salt have to travel far before they reach our frontier. This naturally raises the price and diminishes the temptation to smuggle. The greatest difficulty is experienced

* Observe the date of this memorandum.

with the salt manufactured in the Bhurtpore territory. Brine is there raised from wells, exposed in shallow earthen pans at the mouth of each well and is manufactured at a very small cost, varying from four to six annas per maund. Each manufactory pays a duty to the Rajah of Bhurtpore and the whole constitutes an important item in the revenues of the Bhurtpore State. The usual mode of smuggling is by head-loads. Bands of smugglers collect together on the frontier just beyond customs' jurisdiction, each carrying a load of about thirty seers. The best efforts of the preventive establishment can only secure a few of the band. The rest pass on in the darkness of the night, and the profit on the loads which escape amply compensates for the loss on those which are seized. It has therefore been resolved not only to seize the load but to fine and imprison the smuggler.

Under this system the smugglers would, it was apprehended, have recourse to violence and Mr. Thomason considered that the most that could be done would but palliate the evil. With regard to the salt manufactories in British territory the great difficulty is to distinguish what really is a manufactory of alimentary salt. For many salts are used in commerce which in their crude state contain a considerable quantity of muriate of soda, and there is no certain rule for determining what quantity of muriate of soda is necessary to constitute the work and manufactory of alimentary salt, liable to destruction and exposing the manufacturer to the penalties of Act XIV. of 1843. This difficulty is the most experienced with regard to saltpetre works.

The duty of twelve annas a maund on cotton was changed in 1815 to an ad valorem duty of five per cent. subject to a drawback on exportation. The amount of duty levied from 1834 to 1842 was Rs. 34,95,733 and the drawback amounted during the same period to Rs. 1,20,348.

The fixed duty on sugar was so adjusted in 1813, as to represent a fair average of what was formerly demanded. The trade in sugar is chiefly export, the countries lying north and east of the Ganges being those which produce sugar in abundance for the whole of Upper India. The only temptation to import, is in that sugar, produced indeed in our territories, but exported to Bickaneer, there refined and brought back in the form of sugarcandy. The arrangements for the levy of duty on sugar are very sufficient and little if any passes without payment.

The miscellaneous articles paying duty prior to September, 1843, produced a revenue in that year of Rs. 1,75,253 which fell off the next year to Rs. 16,409.

Moostajuree Estates in Benares.—The estates in

7th Decr 1844.

the province of Benares not settled in Zemindaree in 1795 became the fertile source of chi-

canery and fraud. The operations that came into practice in 1837 partially remedied the evil, confirmed the title to landed property and tended to give security to all classes.

Settlement of Dehra Dhoon.—The temporary settlement of this province in 1830, designed to last ten years, was made on the principle that Government was the entire possessor of the land and might bestow it on any one. The Government therefore bestowed the cultivated land in proprietary right on the actual cultivators, and made the Teekadars or former Malgoozars, servants of Government to manage the villages and make the collections, receiving for their services ten per cent. of their collections. The proceeding was not entirely equitable, some villages had been settled by private speculators at their own risk and cost, whilst in others were a body of proprietors cultivating in part themselves and in part through the resident Assamies, who never exercised any proprietary rights. In 1837-38 the Dhoon was thrown open to European speculators on more favourable terms than those offered in 1830. The land was to be held rent-free for three years, and was not to reach the maximum of three annas a beegah till after twenty years. European speculators eagerly accepted the offer, the old settlers in the Dhoon became alarmed and the spur given to agriculture was great. The measurement of the Dhoon took place under Captain Brown in 1838-39, as before, three annas was to be the maximum demand per beegah, a part of which was to be the right of the Mokuddum and a part of the Government. One-fourth of the culturable land was to be left unassessed avowedly for grazing, whilst the remainder was to be given, on the grant terms of 1837, to the village, if they would take it. Unoccupied land beyond the limits of any village was to be at the disposal of Government, and the actual cultivators were to be recognised as the proprietors of the soil. The exceptions taken to this settlement were three in number:—

“*First.*—That faith had been broken with the persons who brought land into cultivation on the strength of Colonel Young’s proclamation of March 1st, 1838.

“*Secondly.*—That the Surveyor measured much land as cultivated, which in fact was not cultivated or occupied, and that as the settlement had been made with the cultivating occupants, the rate on these lands could not in some cases be realized. These lands are called Shamilat.

“*Thirdly.*—That the assessment had been fixed on the cultivated and occupied land according to the English professional measurement and not according to the native khusreh measurement, the former being in excess of the latter, whilst the latter alone

shows in detail the extent of each proprietor's occupancy. This excess is called *Beshee*."

Mr. Thomason examines into these exceptions and proves them groundless. He moreover remarks that some villages have fallen into decay whilst other new villages are growing, yet is of opinion that the advantages possessed by settlers in the Dhoon are not few, and there is every prospect that agricultural operations will succeed, if they are prudently and economically conducted, and care be taken to give good titles and scrupulously to respect and protect all rights to landed property.

Bhej Burar Tenures in Bundelcund.—The term *Bhej Burar* in the Bandah district, is applied to these estates in which the Government demand and the village expenses are made good by a rate (*burar*) on the land and not according to ancestral shares. The generic characteristic of the tenure is that the rate is not fixed, but liable to adjustment. The tenure is a kind of *Bhyachara*, but may be *Putteedaree*, imperfect *Putteedaree* or *Zemindaree*. "In perfect *Putteedaree* tenures, the whole land cultivated, *bunjur*, and waste, is divided, and held in severalty by the proprietors. At the time of settlement, the *Jumma* is distributed over the several holdings, and so long as the distribution then made, holds good, each proprietor is bound, according to that proportion, to pay his share of the village expences, and his portion of the sum to be made good in consequence of the insolvency of any of the proprietors. In imperfect *Putteedaree*, part of the *Mehal* is held in severalty, and the remainder being either waste, *bunjur*, or cultivated by *Asamces*, is common. In these cases, at the time of settlement, the proportion is fixed in which the balance of Government *Jumma*, and village expences, is to be made good, after the proceeds from the common land, (if there are any) have been carried to credit. This rating is also liable to change, and more so than in the preceding case, because proprietors are generally allowed to bring into cultivation, according to their means, the common *bunjur*, without necessarily altering the proportion in which they are to contribute to the village charges. In *Zemindaree* villages, there is no fixed separate property in the land. Each man is rated according to his means, and the cultivation is arranged at the commencement of each year according as circumstances may decide. The rate is liable to variation here also, more so than perhaps in the preceding cases."

The peculiarity of the tenures probably arises from the fact that though the soil of Bundelcund is fertile, yet its produce is uncertain from the impossibility of irrigation. In the district of Humeerpore, a change is however going on, property in land

has become more valuable and individual rights have lost much of their uncertainty. The administrative papers of that district show three tenures :—“ The Rukbah Burar or pure Putteedaree,—where all the land is divided, the quota of the Jumma to be paid by each proprietor fixed for the term of settlement, and each man made to bear his own expences, and be liable in his land for his own default. The Muzrooa or Malgoozaree Burar—where the culturable or unculturable portion only of the mehal is so divided. The *Annah* Burar—where the land is cultivated by proprietors or non-proprietors at fixed rates, and the whole proceeds thrown into a common stock, which is divided amongst the proprietors according to their ancestral shares.”

There is also a paper affixed to the foregoing, being the result of Mr. Thomason's visit to Bandah. The Government demand was then in arrears, and Mr. Thomason thought that it could not be recovered without causing an extensive alienation of property, and the ruin of industrious cultivators.

Settlement of Delhi.—The settlement is with few exceptions very light, the soil generally fertile, if by any means it can be irrigated, whilst the villages are substantial and well-built, and the inhabitants as fine a body of well-clothed independent manly peasantry as any country can produce. In the Hissar District the very large reductions in the assessment made by Mr. S. S. Brown were most wise and successful. There is every reason to believe that the lightness of the present assessment will tend to fix the population, give them habits of industry and application and will confer on landed property a value long unknown.

The tenures of the Rohtuck district may be designated as coparcenary that is “ the profits from the land are distributed according to a local custom :—the land being all, or in part, divided between the several proprietors, who live upon the surplus produce of the land, after payment of the government jumma, which is distributed according to a *bachh* or rate upon the several holdings.” The feature which binds these communities together, is their joint responsibility for liquidation of the Government demand. Under former Governments the villages were held together by the necessity to provide for their safety and resist oppression. They often preyed upon their weaker neighbours and enriched themselves by spoliation. The payment the village made to Government was, under such circumstances proportioned not only to the extent of their cultivation and the number of their cattle, but also to the number of their families or fighting men. Hence arose the system called *choribacha*, which distributed the Government demand partly on the land and cattle and partly on

the hearths and turbans. Under the British Government this mode of rating the proprietors was inapplicable. The villages were accordingly measured and a record formed. Mr. Thomason thought that the villagers under this settlement would find it advisable to redivide the whole area, so that the fields of each Puttee should be together and not widely separated as was then the case.

The Panceput district is generally in a flourishing condition with the exception of the large Istumraree of the Kurnaul Munduls in the North-east. This should be remedied and subordinate proprietors should not be left at the mercy of the Munduls, mere assignees of the Government Revenue. With regard to the Delhi district Mr. Thomason thought there was every reason to hope from its contiguity to the capital of the North-West that it would flourish. But at the same time he apprehended that the crafty and the influential would be disposed from the value of the land to make the courts of justice instruments of "working out their schemes of oppression." He observes that great facilities for artificial irrigation by means of bunds may be found in the southern part of the district. In the Goorgaon district the means of artificial irrigation are abundant. The inhabitants of the district are generally a simple and tractable people and a light assessment will rapidly rally them from their state of poverty.

To this paper is attached a memorandum containing the heads of a proposed arrangement for the better administration of the tract of land near Kurnaul assigned to the Munduls.

Settlement of Mirzapore.—The paper on this subject is not such as will repay condensation, it was written on the 30th August, 1845.

Settlement of Benares.—The settlement of this zillah appears to have been generally approved save in the case of Talooka Kurnadaury. Of this Talooka the Rajah of Benares stood only in the position of a Tehseeldar, nevertheless so soon as he was left to the exercise of such powers as were entrusted to him he set himself to destroy all rights but his own. In this he succeeded, the dispossessed Zemindars failing ultimately to recover their estates, because they had not prosecuted within twelve years from their dispossession, and yet this delay was entirely due to the local authorities, who did not discover till 1828 that cases of dispossession could be heard in the ordinary zillah courts. The Collector of Benares was therefore invested with powers to revise the settlement of Talooka Kurnadaury and restore the Malgoozars to their rights. The Rajah's government over them was also curtailed.

Talooka Budlapore, Zillah Jounpore.—In 1795 this Talooka was confiscated from Sultanut Sing and settled by Mr. Duncan as follows :—

	No. of Villages.	Jumma.		
With Zemindars,.....	74	{	23,678	
Amauny,.....			910	
With Moostajurs,.....			11,513	
Total,.....			74	36,101

In 1797 however the Government constituted Rajah Sheololl Doobey, Talookdar, that is they invested him with their own powers. If he therefore in the name of the Government behaved illegally, they were bound to remedy the wrong done. The Rajah, however, denied the Government to have any power of interference in his Talooka. Under these circumstances the following settlement was confirmed :—

Mofussil jumma,	...	...	...	...	34,782
Talookdar's allowance,	...	...	...	...	3,994

Government jumma, 30,788

And until the Rajah accepted the terms, the talookdaree allowance was to be allowed to accumulate.

Revenue Accounts.—The following is an abstract of the revenue accounts of the North-West Provinces from 1834-35 to 1841-42 :—

15th June, 1844.

	Demands on accounts of current year.	Collections in the demand of current year.	Nett balance after deducting Remissions.	Gross Receipts.	Charges.	Nett Receipts.	Remarks.
1834-35,	4,36,45,116	3,77,89,340	57,23,112	4,52,10,434	65,04,788	3,87,05,696	
1835-36,	4,17,20,064	3,76,92,030	38,30,840	4,41,30,685	67,54,820	3,73,75,865	
1836-37,	4,28,73,225	3,91,13,138	35,42,169	4,52,75,516	67,36,511	3,85,39,005	
1837-38,	4,13,10,519	3,30,68,745	79,86,510	3,31,63,862	65,29,890	3,16,33,972	Famine year.
1838-39,	4,55,48,990	3,63,02,151	69,44,863	4,39,12,570	61,81,339	3,74,31,231	
1839-40,	4,12,06,686	3,56,52,810	49,94,102	4,18,46,441	70,30,058	3,48,16,383	
1840-41,	3,76,12,610	3,47,04,023	24,13,672	4,02,26,573	63,76,763	3,38,49,790	Instalments post- poned.
1841-42,	4,44,64,952	4,11,62,994	29,12,238	4,56,57,421	63,07,163	3,93,50,258	
1842-43,	4,41,89,847	4,06,79,465	31,60,705	4,72,85,822	67,43,917	4,05,41,905	
1843-44,	4,37,14,179	4,12,57,857	23,72,633	4,67,95,483	60,64,018	4,07,31,465	

It will be observed that the demand for 1840-41 is much less than in former years, and that the collections for 1841-42 and subsequently are much greater than formerly. These variations are due from the instalments of revenue falling due on the 1st of each month of the Fussailee year, whereas the accounts were made out according to the English year. Accordingly as the Fussailee year was more or less in advance of the Civil year, the sum collected was likely to be larger or smaller although the demand might be little altered. The minute subdivision of landed property in the North-West moreover made the collection of the eight or nine instalments exceedingly troublesome. But this was not all. The instalments were so fixed that the demand would be made when the crops were in the ground and before the produce could be brought to market. The proprietors were therefore forced into the hands of the money-lenders. A two-fold change in the revenue system was therefore made, the number of the kists was reduced and they were thrown further forwards in the year. The effect on the annual demand for 1840-41 was to make for that year one instalment short. Moreover, other causes were at work to derange the accounts of the years under review namely the famine year of 1837-38 and the settlement operations. The effect on the accounts of the new arrangement of the Government instalments is of very small importance, when compared with the effect on the agricultural concerns of the country. It is the greatest change made before 1845 in the revenue administration of the North-West. By it the Government voluntarily surrendered its lien on the crops and encouraged the agriculturists to cut, carry, and sell their produce and then pay the revenue from the proceeds of the sale. "As is the case in all changes amongst a rude people, it was viewed with much suspicion at first. The Native Government Officers were opposed to it, because it increased the difficulties of their work, and deprived them of many established sources of petty gain. The capitalist and petty money-lenders were averse to it, because it deprived them of the advantages and power they before possessed. The large extravagant proprietary communities of Goojurs or Rajpoots profited little by it, because they always lived thoughtlessly, and knew not how to keep money when it once came into their hands. Those whom it most benefited were the least influential and intelligent class of the community, viz. the industrious and thrifty cultivators. But to these it is an evident and a substantial boon.

"Another interesting effect of this great change is upon the currency of the country. It is evident that the same sum, which before was paid into the Government Treasuries in smaller sums at eight or nine periods of the year, now has to be paid

in at four periods in larger sums. The money, which might before have passed eight times through the Government Treasury, will now ordinarily pass but four times.

"As the collection of the land revenue is the great financial operation of this part of the country, it might be inferred that a much larger quantity of specie would now be required to conduct the pecuniary transactions of the country than was before necessary, and that there would be great complaints of scarcity of money.

"Such however has not been the case, so far as common report goes" and the returns exhibit an evident improvement in the finance of the country.

Civil Decrees.—The Government of India enquire, whether it is desirable or necessary that the Collectors of Revenue should be furnished by the Civil Court with copies and abstracts of all decrees affecting proprietary right or possession of lands paying immediate tribute to Government. Under the revenue system of the North-West Provinces the functions of a Collector are to a certain degree judicial, for an accurate record of rights is necessary for the due performance of the Collector's functions. Therefore it is most important that the Collector should be apprized of all confirmations or alterations of the record which the Judge may make. At present some of the Collectors are superior men to the Judges with whom they are called upon to act, it is therefore some safeguard against error that all decisions affecting landed property should come under the cognizance of the Collector as soon as possible, and be carried by him into effect. The Judge can never know to what process of examination his decision may be subjected by his brother functionary, the Collector must implicitly obey, and if he unreasonably remonstrate, he brings discredit on none but himself. The value and the political importance of maintaining the closest watch over the proceedings, of the Civil Courts it would not be prudent to under-rate. The man who "can make good his claim in our Courts, enlists the irresistible force of the Government on his side. By whatever means a suit is gained, however great the injustice, it is unalterable. No change of Officers, nor lapse of time, can bring redress for a wrong once legally inflicted. The death or the ruin of the antagonist brings no reparation to the defeated suitor. The consequence is evident. The enmity of the ruined man is transferred from the individual to the State. He feels that henceforth there is no hope for him but in the downfall of the system. He becomes as much a disaffected man as though he had been ruined by some direct act of the Government.

"These facts are the evident and unavoidable result of the esta-

blishment of a firm Government. But the change is yet recent in the memory of the people, and they have not yet acquired so completely the feelings of respect for the judicial authority as to acquiesce implicitly in its operations; especially when those operations are not conformable to their ideas of justice. It is not many years ago that an insurrection was occasioned in Ramghur, and the Cole country, from the unrestricted operations of the Courts of Justice. The Government perceived the evil; and at once, by excluding those territories from the influence of the Regulations, put a check on the obnoxious proceedings. It would be prudent to bear this in mind, and not lightly or unnecessarily to relax any means of control, which the present fair and legitimate working of the system affords."

Mouzah Olinda, Zillah Agra.—In this village there were ninety-seven puttees, all of which were in arrear. 23rd November, 1844. The assessment was not severe and both the Collector and Commissioner thought there had been considerable embezzlement. The Collector therefore advertised the sale of the village, on this Mr. Thomason remarked:—"Before an Officer proceeds to advertise for sale he should satisfy himself that the estate is marketable, and that there is a fair prospect of effecting the sale. But when advertence is had to the size and power of the community in Mouzah Olinda, the unanimity of action apparent in their proceedings, and the advantage of their position on the Bhurtpore boundary, there can be little difficulty in concluding that no capitalist would buy the village, or that if he did buy it, bloodshed and a most discreditable struggle between the community and him would be the result. The public Officer, who could deliberately enforce such a measure, must have carelessly studied the history of our early administration of these provinces, or have formed a most erroneous estimate of the character of the people."

The remarks on the sale of Olinda Mouzah are prefixed by a general disquisition on the duties of Collectors.

Grants of Lands in Saharanpore.—The orders of Government dated November, 1839 recognised a distinction between European and native grants. 11th February, 1845. This distinction was forced upon the Government by that superior energy and influence possessed by Europeans, and their limited acquaintance with the rights of the people of the land and the feelings of the natives. This distinction was imperfectly explained to the local authorities, who in giving possession to European grantees, and exchanging engagements with them exceeded their powers. Such grants were therefore reconsidered "with every indulgence towards the present occupants." The mode of their settlement is not of general importance.

Act for Sale of Lands in Execution of Decrees.—By the proposed enactment the conduct of such sales was to be taken entirely out of the hands of the revenue officers and to be conducted by the Court themselves. The Lieutenant Governor expressed his earnest hope that no such course of proceeding should be adopted.

Minute on Police Battalions.—During the first forty years of our possession of the North-West Provinces crimes of open violence became comparatively rare. In their place the crimes of assassination, homicide, burglary and theft appeared on the calendar. Such being the case, the state in which Hindoostan now is, would lead one to expect more flagrant and revolting immorality than before prevailed. The strong hand of power has repressed open violence, but it has not and cannot affect the dispositions that prompted to crime. "The same injustice, the same tyranny, the same avarice and covetousness, now possess the minds of men as formerly. No moral regeneration has been affected. But these tempers, no longer able to work their purposes by open means, accomplish the same ends by secret machinations. A few years ago a man, at feud with his neighbour, would have gathered his friends around him, and attacked his enemy in open day. He will now hire an assassin to effect his purpose. The person, who coveted his neighbour's lands, a few years ago would have picked a quarrel with him, routed him, and driven him from his possessions. He will now seek to oust him by forgery and perjury in a Civil suit."

It is necessary to bear this change in mind in police arrangements. All police measures should now be directed to raise the respectability of the police, and to draft into them men of higher intellectual and moral qualities, rather than to strengthen their organisation.

The then nearly organised police battalions, to which this paper has reference, had not been organised on any such principles. Their organisation was not a measure of police, but a measure for creating an irregular military force to relieve the regular army of Civil duties. The skeletons of the new Battalions were formed of volunteers from the line and the very worst men were in consequence made over to them. Upon the skeletons thus formed were engrafted men from the old police and new recruits selected solely because they were young stout active men who could easily be taught to handle a musket.

Mr. Jackson, the Magistrate of Agra commenced the formation of the battalion there. It speedily became simply a military battalion and was employed on military duties, as also were the battalions organised at Delhi, Kurnal and the Protected Sikh

States. In Bundelcund alone the duties of the battalion were strictly confined to police duties. The measures proposed for the amelioration of the police are as follows :—

“The pay of the Mofussil Police should be increased, their numbers being diminished.

“The Tehseeldars should be generally invested with Police powers, under Regulation XI. 1831.

“Great attention should be paid to improve the rural Police by holding the Zemindars to their responsibilities, and by obtaining their aid.

“The Police Battalions should be fixed one in each division and kept a good deal together, being employed to guard Jails, Treasuries, &c. and to relieve the regular troops from Civil duties. Where, as in Bundelcund, the numbers will admit of it, a small body of men under a respectable Officer should be kept at each Tehseeldarce to protect it, and to be at the disposal of the Tehseeldar to send out on any emergency, where vigorous action may be required. Under such an arrangement, the Thannah force may be reduced below what it would otherwise be.

“To increase the emoluments, and raise the position of the higher Police Officers in large towns.

“To vest either the Tehseeldars or Moonsiffs gradually with powers as Assistant Magistrates, to enable them to try petty cases, or to prepare heavier ones in the Mofussil without sending the parties in to the Magistrate.”

Repulse of the Police from Mythna.—The police were engaged in serving a criminal process. The village in 14th August, 1845. which the criminal process was to be served belonged to a Goojur tribe. The Goojurs generally are turbulent and unthrifty. It appeared to Mr. Thomason therefore probable that they were sinking before their more industrious or crafty neighbours, who enlist the arm of Government to forward their own schemes of aggrandisement by the dispossession of the Goojurs. Their fate is to be regretted as it directs their resentment from their oppressors against the Government who support oppression.

Preservation of Timber Forests.—There can be no doubt that every year wood is rising in price and the 17th October, 1845. larger-sized timbers are now difficult to be procured. The fact proves nothing, for such is the natural and inevitable result of national prosperity and of a consequently continually increasing demand upon a limited supply. The question now under consideration is how to make it worth while to cultivate and grow timber with the view of obtaining a profit on the outlay. At present the public are permitted to cut timber as they like, paying the Government a duty upon its re-

moval from the forest. The evils of the system is, that timber is cut without due regard to economy. The alternative is, that government should itself come forward as proprietor of the forest and determine what shall be cut and what shall be sold.

Stone Quarries.—At the time of the permanent settlement the Government separated the stone mehal from the land revenue. At first they worked the quarries on their own account and sold the stone at fixed prices. Subsequently they fixed a certain rate of duty, this duty however only affected the Mirzapore quarries not those near Delhi and Agra which came into our possession subsequently to 1808. The stone duty was fixed at so high a rate that the farmers of the stone mehal levied less than the legal duty and only paid to Government the price they were willing to pay in order to have the command of the market, which the power of levying a heavy duty conveyed. There is no reason why the Government should raise a separate revenue from the stone in only the Mirzapore district. The present monopoly of the merchants should be broken up and the sayer rights left to the zemindar. The first step to the adjustment of the system should be to make a register of all the quarries in the district, information should also be collected concerning the Agra, Delhi, Bandah and Allahabad quarries.

Settlement of Puchawur, Woorynee and Jadoonpore.—These mouzahs are in zillah Muttra. The zemindars of these mouzahs petitioned for a reduction of settlement. The Revenue Board were inclined to grant such a reduction in the case of mouzali Woorynee. Mr. Thomason thought any reduction unnecessary and remarks :—

“When a settlement has been deliberately sanctioned by the Government, it should not be lightly impugned. It is a contract binding on both parties, not to be set aside on a mere question of consideration for the people, but only on strong proof of the impossibility, or impolicy, of attempting to realize it. When petitions of over-assessment are lightly received by the Board, and reports called for from the district Officers, it necessarily results that expectation of reduction is formed, and all those arts and intrigues are called into operation, which are so well known in this country, as the means by which an ignorant and short-sighted people endeavour to force a reduction of the Government demand. Bribes are given, land is thrown out of cultivation, agriculture is neglected, and every show of abject poverty is made to support the plea. It is only by steadily refusing to receive such excuses, and in ordinary years promptly and rigidly enforcing the demand, that the exertions of the people can be properly

called forth." Of all pleas which can be adduced to support a recommendation for reduction of jumma, perhaps distress and poverty, taken alone, are among the weakest. For periods of distress must constantly occur, and changes of property follow, till the people learn wisdom and resolution enough to throw off their surplus population.

Purgunnah Secunderpore.—The paper was written on the 20th August, 1816, and is of local interest.

Judicial Decisions by Settlement Officers.—In the North-West Provinces it was decided from their first assumption that the Civil Courts as then constituted were incompetent to decide on property rights. The officers of the Revenue Department were therefore authorised to declare existing rights. At the same time liberty was left to any one to bring out his individual case from the mass and to obtain a special consideration of it in the Civil Court. Every effort has therefore been made to arrange the records of the Revenue Department so as to enable the Courts to have free access to them, and obtain any information of which they may be in search. From this view the Courts dissent, and say:—"It is not their duty to travel out of the road, by attempting to make 'discoveries,' which may be as prejudicial to the interests of the one, as beneficial to those of the other party. But they are bound to receive whatever evidence, oral or documentary, the parties may produce, and to judge accordingly. Any other practice would be as inexpedient, as it would be illegal; it would lead to the production of all kind of irrelevant matter, the consideration of which would needlessly occupy the time, and perplex the judgment of the judicial authorities; it would destroy the character of the Civil Courts as impartial tribunals; it would open the door to diffuse and discursive enquiry, quite foreign to the duty of a Civil Court, and equally incapable of being restricted within proper limits; it would, in short, entirely change the constitution of the Civil Courts, and their judicial practise; it would superadd to their proper legitimate functions the duties which now devolve on the litigant parties and their pleaders, and convert them into instruments for the furtherance of particular views, as set forth in correspondence between the Government and superior revenue authorities."

Works on the Ganges Canal.—Mr. Thomason proposes that in accordance with Major Baker's request certain artificers and materials for the construction of the Canal should be obtained from Europe. The undertaking is neither one of display, nor of doubtful utility, but an economical measure necessary for the stability of the revenue.

Abkaree Charges and Collections.—The average collections for ten years shew that the collections generally follow the circumstances which are known to have affected the prosperity of the country. Thus the famines of 1833 and 1837, both caused a decrease in the collections; heaviest in those districts which are known to have suffered most. The measures adopted by the Sudder Board in 1842, were followed by a steady increase in collections, and the Lieutenant Governor is disposed to consider it unnecessary to adopt the plan pursued in some districts in Bengal, and by the introduction of a separate and costly agency supersede that by which the department is at present efficiently and economically administered.

Rent-Free Tenures in Ajmere.—The object of this paper written on 12th December, 1846, was to place on record rules to guide the decision of Government officers on such tenures.

Tanks in Ajmere.—The value of Tanks in Ajmere is very great, whilst the cost of their construction and repair is inconsiderable compared with the benefit which the reservoirs produce. The embankments of such works require, however, at all times to be looked after, as on their efficiency will depend in some measure the prosperity of the district.

Revenue Administration in Ajmere.—The land revenue in the Khalisah villages of Ajmere is collected from each individual cultivator in proportion to the extent of his cultivation or the produce of his field in the year, is therefore kham. The payments are in money and consist partly of fixed rates on the fields (*zabtee*), and partly of commutation for a fixed portion of the crop, as determined by estimate (*Kun*). The system of kham management is open to many objections. In estimating the crops, previous to fixing the value of the Government share, there is much opening to fraud, speculation and oppression. The system of village settlements should therefore be introduced and long leases granted. The memorandum concludes with suggestions for the completion of Ajmere embankments.

Administration of Mhairwarrah.—“Mhairwarrah consists of three parts, one of which belongs to Ajmere, one to Meywar, and one to Marwar. They are considerably intermixed; the British Purgunnah of Bhailean lying far south, and being surrounded on all sides by Meywar and Marwar Mhairwarrah. But this territorial division does not at all affect the character of the people. They are a distinct race from the *Jeypoories*, held together by the strong ties of a common origin and a distinct organization. The

Mairats are nominally Mahomedans, and the Mairs nominally Hindoos; but they intermarry, and possess none of the bigotry, and little of the superstitions, of the two creeds. They hold the people of the plains, and especially the Rajpoots, in contempt and hatred. The Rajpoots were never able to obtain a firm footing in their country. Whatever small revenue they could get from the country was obtained at a cost, both of life and of money, far exceeding its value. The Mairs were constantly making forays into the plains; and the history of all the neighbouring Rajpoot chiefs, Nussooda, Khurera, Bednoor, Tall, Deogurh, bears ample testimony to the ferocity with which these forays were conducted.

"The British arms first completed their subjugation. But Meywar and Marwar were quite unable to manage their portions of country. The Mairs broke out into rebellion, massacred some of the Police Officers stationed amongst them; and it became necessary for our Government, by a fresh exertion of its Military force, and with some difficulty, again to bring them into subjection in 1820. An arrangement was then made by which Marwar and Meywar made over to us the management of their portions of Mhairwarrah. The terms on which this transfer was effected, differed considerably.

"Marwar made over to us twenty villages, of small value, and little capable of improvement. They yielded, in 1824-25, a land revenue of 6,966 rupees; and, in 1845-46, the land revenue was no more than 6,871 rupees. From 1835-36 to 1842-43, we held seven other villages, which promised to yield a considerable sum. Since these have been given back, they have fallen much into decay, and are again becoming troublesome. The Raj was to pay 15,000 company's rupees' contribution to the support of the Mhairwarrah Battalion over and above the expences of the Civil administration of the country. The result has been a yearly excess of expenditure above income, and the Raj is now in our debt on this account no less a sum than rupees 1,85,872 up to the end of 1845-46. It is not apparent on what ground the undeniable right of the British Government to this sum is waived. Meywar made over to our management seventy-six villages, on the understanding that a payment of 20,000 Chittooree rupees (about 16,000 company's rupees) was to cover her share of the Mhairwarrah Battalion, and all the current expences of the Civil administration. These villages yielded in 1823-24, 34,607 Chittooree rupees, land revenue, and now give 91,114 Chittooree rupees, with the prospect of considerable increase. The surplus revenue is appropriated to the support of the Meywar Bheel Corps.

"The transfer of neither portion of Mhairwarrah is perma-

nent. The transfer by Marwar has been renewed twice for eight years each, and latterly in 1843 for three years; and by Meywar first without limitation, then in 1832 for eight years. On the formation of the Meywar Bheel Corps in 1840, the surplus revenue was set aside for the Meywar share of the Bheel Corps. The renewed transfer has been, nominally at least, the subject of negotiation."

Lieutenant Colonel Hall commenced that course by which the wild and ferocious Mairs were under British management, formed into a peaceable race of cultivators. The disbursements, however, are in excess of the receipts and it was therefore proposed that the British Government should give up the management of the country; to this course, Mr. Thomason strongly objects.

Sales of Undivided Puttees in Allygurh.—Mr. Thomason considers the following points to be determined:—
8th February, 1847. "That the Government possess the option of proceeding against the person and property of the individual proprietor, or against the joint-undivided Mehal of the whole community.

"That process should not be so pressed against the property of an individual defaulter, or of a body of defaulters, as materially to weaken or destroy the joint responsibility of the whole community, without the observance of all those precautions which are enjoined in the case of partitions (Butwarrahs)

"That an attempt should not be made to enforce payment of a balance by the whole community, either in the first instance, or in the last resort, when such a proceeding will injure the resources of the State, and deter others from exertion."

Tea Cultivation.—The letter of the Lieutenant Governor on this subject was merely in answer to certain proposed increments of expenditure and other proposals connected with the efficient management of the plantations. The proposals were sanctioned, because it was "evidently the wish of the Court of Directors that the experiment should be conducted on the most liberal scale."

Grand Trunk Road.—Great discretion should be vested in the
10th March, 1847 & Executive Officer on all matters connected
28th April, 1848. with the repair of the road. In accordance with this principle a draft of special rules for the repairs of the Grand Trunk Road and its branches was drawn up. The memorandum contains the rules. Along the whole of the road camping grounds should be marked out at convenient intervals. The ground so marked out should at least be four hundred yards square. To keep it clean and in good repair is part of the duty of the Collector. Burdassit Khannas should be constructed near the spot, when such an arrangement would be con-

venient. Contractors should be found to sell at such Burdasht Khannas articles in most common demand. To effect this, advances may be given on good security. "The Contractors should be prohibited from having any intercourse with the police, as regards the collection and sale of their articles. They should have ware-house room, and shops rent-free, in the Burdasht Khannas; but they are to have no privileges nor monopoly. They should be bound under sufficient penalty to furnish all applicants at the current market price of the day. Detachments of troops or parties of travellers may be supplied retail, but whenever regimental or other Bazars are attached to a Camp, the supply should be wholesale to the persons appointed to receive them. The wood should be made up in parcels each of the value of one pice, a specified number of which are to go to the maund. These should be sold wholesale or retail as may be required. The absolute prohibition against the demand of any articles, either gratis or at less than market-price, is applicable to all Government servants as well as to Sepoys. Police or Revenue Officers are especially bound to pay fairly for what they may require.

"The Contractors should be furnished by the Collectors with certificates in English and Oordoo, setting forth the obligations under which they lie, and the protection to which they are entitled. The price of all articles of fixed value must be specified in their certificate. They must be bound to supply on requisition a price-current of all articles of fluctuating value. This price-current must always be presented to the commanding Officer of a Regiment, on his arrival, in duplicate. He should countersign one and send it to the Collector for his information."

The Police should never interfere with travellers at Serais "to derive to themselves a profit from the undertakings. Their watch should be kept outside the buildings, and they should never enter them in their official capacity, unless to repress evident breaches of the peace, or otherwise in the regular execution of their duty. They must be strictly prohibited from levying any dues from travellers who may alight at Serais, or from compelling them to resort to particular places." For the better protection of travellers Murhillahs should be erected every two miles, and two chowkeedars should be stationed at each. These should always be present at night and should have charge of a mile's length of road immediately contiguous to the Murhillab, on either side. Tehseeldars and Thannas should be brought as much as possible on the Grand Trunk road as may be consistent with other public objects, and the Tehseeldars along the road should be invested with the powers of Deputy Magistrates.

Revenue Administration, Saugor and Nerbudda Territories,

25th March, 1847. *Agra.*—The settlement of the Saugor and Nerbudda Territories was made for twenty years on easy terms. This is a mode of administration which native governments do not adopt. By such an arrangement Government ceases to have that immediate interest in the advancement of cultivation which stimulates a good native government to cause the extension of cultivation by the expenditure of its own capital and the exertions of its own agents. The people are expected from a sense of their own interest to do that which a good native government ordinarily does for them. It is therefore necessary to give a good title and permit the holder to transfer his land or a portion of it by sale or mortgage. In the Saugor and Nerbudda Territories these principles were all neglected. There are two methods by which a remedy may be applied, first, by a legislative enactment declaratory of the persons in whom the proprietary right is considered to rest, second, the introduction of the system of survey and record of rights which has prevailed in the North-West. Mr. Thomason prefers the latter remedy. The error of extreme haste which detracted from the benefit of the operations in the North-West should be avoided, otherwise the procedure should be conducted in a similar manner.

Board of Public Works in the North-West Provinces.—The Public Works carried on in the North-West comprise chiefly the construction and maintenance of roads, the building and repair of jails, hospitals and cutcherries, the formation of canals, reservoirs and embankments. On subjects connected with all these works constant reference has to be made to local authorities, it is therefore better that their control should be vested in an agency at Agra than in a Military Board in Calcutta. The new controlling authority for the execution of Public Works must possess scientific skill and full freedom of communication with the Civil authorities at Agra. Mr. Thomason therefore suggests, that an able Engineer officer should be Secretary to the Sudder Board of Revenue, conjointly with the present Secretary, and should be vested also with the powers of a junior member of the Board. This officer should have the entire management of all Public Works but the Ganges Canal, which might remain under the Military Board.

Registration in Collector's Office.—There are many circumstances connected with the state of landed property in the North-West which facilitate registration. There are few large estates lying in different pergunnahs. A very complete system of registration has long existed in the Collector's office. Registry offices should also be established at the Moonsiffes and Tehsildarrees. It is deserving of considera-

tion whether the Registrars themselves should not be required to keep up a Mouzawar Index, on the same principle as that kept by the Collectors, which should be always open, and in which brief reference should be entered as deeds are registered. To provide against the falsification of deeds in the Registrar's office, and for their ready appearance, the Registrar should send a copy of each deed and of all papers connected with it to the Collector of the district, with a separate Roobukarree for each deed.

Kharij Dhakhil Cases in Juggutpore, Barreilly.—Tunsook Rai possessed the whole of Ilakah Julapore. This he mortgaged to Peetum Rai and sold his remaining rights to Mussamut Bunnoo. Tunsook Rai then applied to the Collector for mutation of names in the register. This the Commissioner disallowed on the ground of the prior mortgage. The sale should have been permitted, for Peetum Rai would still remain Malgoozar and the equity of redemption would merely pass to the purchaser, who could only redeem the mortgage and obtain the management of the estate by the consent of the mortgagee, or under authority from the Civil Court. The seller and purchaser of an estate should apply for mutation of names before the actual transfer. Fraudulent and clandestine transfers would thus be avoided, and on the other hand frivolous objections to the transfer could be set aside. Thus opportunity is granted to all parties to state their pleas, the fidelity of the register is maintained and the Collector debarred from any interference with the free acts of persons without his jurisdiction.

Administration of Khyragurh in Allahabad.—The villages of Khyragurh were formed into a Talooka and handed over to a man of some influence and family for a certain sum. The Talooka became hereditary. His management was unsuccessful, and the Government, in 1837, resumed the Talooka and compensated the Talookdar. The experiment was unsuccessful, the Government were saddled with an annuity and the people remained poor and void of energy. The question for consideration is, how the productive power of the land can be increased, the character of the people raised and the revenue and resources of the country improved. These objects might be obtained, Mr. Thomason thinks, by a judicious outlay on irrigation.

On the management of this pergunnah there is a subsequent letter dated the 18th February, 1846. A ridge of hills divides the pergunnah into two portions, the northern portion is fertile, rich and prosperous, but the southern is of poor soil and uncertain produce. When these two dissimilar tracts formed one mehal, then the loss on one portion was compensated by the gain on the other. But separate engagements were taken for every village,

and the anticipated result followed. The northern portion gained by the change, but the village proprietors in the southern portion became poor and their estates fell into disorder. Under these circumstances attempts should be made to find final proprietors with the villages.

Customs and Roads in Central India.—"The tract of country to which the present remarks apply is that 10th August, 1847. which is bounded by the districts of the Bengal Presidency on the north and east; by the districts of the Bombay Presidency and the Nizam's Territory on the south, and by the desert on the west."

This tract is divided into several independent principalities, some of which are of considerable extent and yield a large revenue, but others are extremely insignificant. No interference has hitherto been exercised, on any systematic plan, with the customs revenue of any of these States. Native States are jealous of all interference in their say or custom's duties. They consider the power to levy such duties the peculiar prerogative of sovereignty and the badge of independence. Besides, religious communities or mendicants consider the trade of the country a fair source of profit and often extort a considerable income by addressing themselves to the superstition or fears of the merchant or traveller. The impositions upon trade thus vary according to the strength of the Central Government. They also vary according to the caste, rank, or influence of the travelling merchants. Merchants of large capital and great influence are able to compound for the duties on their goods. The burden falls almost entirely upon the petty dealer, who is thus excluded from the market. Most States farm their customs revenue to some great merchant. In such case, the lease is taken not simply for the fair levy of a fixed tariff, but for the power of commercial monopoly which the farmer obtains. The exactions are very considerable. Thus Neemuch is supplied with grain from Barah in Kotah, distant 120 miles. On the journey, duties are levied at six places and amount, before the arrival of the grain at Neemuch, to no less than twelve per cent. on the original cost.

Mundesore imports her grain from Bhopal and from Barah. The import duties on grain from the former place amount to twenty-one per cent. on its price at Bhopal, and from the latter place to rather more than seventeen per cent. upon its cost at Barah. Yet the natives do not desire the abolition of the transit duties. The benefit of such a measure is not palpable at once to the consumers, whilst the great merchants, who influence public opinion, deprecate a change which exposes them to the rivalry of every petty dealer. Still it is morally the duty of the British Government to exert itself in this matter, for the abolition or control of

the transit duties will contribute essentially to the welfare and prosperity of the States virtually dependant upon it. Improved customs arrangements in Central India would, moreover materially increase the British revenue from customs. Central India consumes the sugar which pays duty on crossing the North-Western British frontier line, and it supplies the salt and cotton which is brought across that line. Increased advantages for the transport of these articles could not fail to stimulate the trade in them. English cotton, picce goods and woollens, as well as hardware and crockery, would be much more largely consumed than at present, if the customs duties presented fewer obstacles to their freer and rapid transport. Trade might be relieved from its burdens by the establishment of a customs league or Zollverein, by the separation of town from transit duties, by fixing on the main routes of commerce and regulating the duties on them, and by forming good roads along these lines.

Export Duties.—The Court of Directors in a despatch dated

30th September, 1847. April 22nd, 1846 proposed:—

1st. The abolition of all export duties except indigo.

2nd. The abolition of double duties on imports and exports on foreign bottoms.

3rd. The publication of a General Tariff of duties for British India, the trade from port to port being left free and unrestricted in all articles with the exception of salt and opium.

Mr. Thomason objects to the first proposal on the grounds that the export duties with the one exception of cotton are not materially complained of, and that such duties, even in the exceptional case, do not act injuriously on trade, that there is nothing objectionable in the mode of the levy, and that the duties constitute a valuable fund from which trade may be greatly facilitated and industry promoted. Mr. Thomason advocates the abolition of double duties on foreign bottoms, inasmuch as such double duties infringe the principles of free trade.

With regard to the 3rd proposal, Mr. Thomason observes, that the abolition of the duties from port to port in India rests on the supposed exemption from duty of all inland trade. This is very far from being the case. The whole of Central India and Rajpootana is almost a sealed country. The inland transit duties were abolished in British Territories because they were found to be inordinately oppressive; whenever the duty could be retained without great injury to trade it has been continued. But the export duties by sea are not oppressive, for vessels on leaving our ports cannot be entirely released from control or examination and the degree of control and examination which is necessary for other purposes suffices to enforce the payment of the export du-

ties, without increased cost to the State, or any material increase of trouble to the merchants, beyond the payment of money. When there are two courses for trade, by land or by sea, and one of them possesses considerable advantages, there does not appear any sufficient reason why the State should not impose a moderate duty on the transport of goods by that more advantageous route. It would undoubtedly be better that trade on the canal as well as by road, on the sea as well as by land should be free from all impost; but the Government must look for some return for its outlay in the country, and the sea-borne traffic should not be exempt from a contribution, the equity of which would not be questioned when imposed on boats that pass by a canal. As regards the General Tariff for all India there can be no question as to the expediency of such a measure, if regulated entirely by financial considerations.

Canal Charges.—Canals are of the greatest importance to the welfare of the country. Their maintenance in an efficient state requires fertility of expedient and promptitude of action, which do not admit of previous calculation or accurate estimate.

The whole effects of the Agency possessing the management of these works should be directed to providing that the Executive officers exercise sufficient control over their establishments. The superior Agency should never attempt to maintain closeness of control and minuteness of check. To fix rates, and expect Executive officers to work in conformity with these rates, is both perplexing and embarrassing. Peculation and dishonesty go on with a general observance of forms, high-minded men are averse to take employment in the department, which by this management is rendered timid, discontented and inefficient.

Settlement of Resumed Maafees.—The memorandum discusses the terms on which Maafee tenures are to be settled with Maafeedars, the cases in which the Maafeedars are to be admitted to settlement, and the period of currency of the settlement made with Maafeedars. When resumed tenures are settled with ex-Maafeedars and the actual rental is known, the Jummah should be fixed at half the annual rental; when the rental may not be ascertainable, the demand should still be regulated according to this rule. The rule for the selection of parties with whom the settlement is to be made, is, that those who have the actual proprietary occupation of the soil should not be disturbed. It will sometimes be difficult to determine the point of actual possession but "where the Maafeedar has cultivated the land with his own ploughs, or by ryots introduced by and dependent upon himself; where he has lived on the spot, has dug wells, planted trees, extended the cultivation, and spent

considered to have been in possession in the sense required, whatever may have been the origin of his tenure. But where he has lived at a distance, and has left all the trouble and expense of management and of improvement to the original Zemindars, and, more especially, when he has been in the custom of granting them a lease subject to the payment of a fixed sum, the possession of the other party will be equally manifest." The period of the settlements made with ex-Maafedars should be the same as in the rest of the district or pergunnah where the land is situated.

There is a second letter on this subject dated the 29th January, 1848, it has especial reference to Rohilcund.

Navigation of the Ganges.—The letter on this subject was written on the 26th October, 1847, and its summarisation would be useless, it merely referring to certain establishment charges.

Village Schools in the North-West Provinces.—The scheme 18th November, 1846, contemplates the endowment of a School in every village of a certain size. For the maintenance of the school the Government are to give up their revenue from the land constituting the endowment, on assurance that the Zemindars appropriated the land for the maintenance of a school-master. A jagheer of from five to ten acres of land will give a rental varying from twenty to forty rupees a year. The school-master moreover will still receive presents and fees in money, food and cloth. The number of mouzahs in the Regulation Provinces is 79,033 and of these, 18,000 contain 100 houses and upwards. The average jumma of the land proposed to be alienated is two rupees, supposing then a school established in every village of the size specified, the revenue of the State would be diminished to the amount of 1,80,000 rupees, if the endowment were of the minimum size, and if of the maximum, to the amount of Rs. 3,60,000. The number of boys of an age requiring school education in a village of 100 houses is about forty, a number not larger than one man can teach. In a subsequent letter dated the 18th April, 1848, Mr. Thomason observes that the objections to money payments are, that consisting of petty payments it is difficult to secure their faithful disbursement in remote parts of the district, that they lead the school-master to look exclusively to the Government and to neglect the conciliation of the people, that there is always danger lest the appointment of a village school-master without the wish of the people should discourage the natural efforts of the people to supply their own wants. To ensure the effective and vigorous working of the Government Schools a Visitor-general should be appointed, on a salary of

one thousand rupees a month, and travelling allowances at the rate of eight annas a mile. The letters conclude with a general outline of the scheme for promoting vernacular education.

State of the Currency in the North-West Provinces.—The Company's rupee has superseded the old currencies throughout almost the whole of the North-West. Many native States possess the privilege of coining. This privilege they value highly. Supposing the British Government desirous to introduce their coin into general circulation, the following measures will gradually and inoffensively accomplish the object :—

“*First.*—The seignorage should be reduced to its lowest limits, either so as just to cover the cost of mintage, or even to risk some loss. A small seignorage, if it keeps the Mints in full work, is evidently preferable to a high seignorage which does not bring a sufficiency of bullion to the Mint. The capabilities of the Mints should regulate the price to be offered for bullion.

“*Secondly.*—Assay Offices and Bullion Depots should be opened, wherever it is peculiarly desirable to reform the currency. For instance, the establishment of an Assay Office at Ajmere, where a good price would be given for foreign coins, would control all the Mints in Rajpootana. One at Indore or Mundlaur would withdraw foreign coins from circulation in Central India, whilst another at Ferozepore or in the Jullundur Doab would bring under regulation, the currency of the Punjab.

“*Thirdly.*—All pecuniary transactions with foreign States should be only in British currency.

“*Fourthly.*—Foreign States, which had no Mints of their own, might be influenced to declare the British coin to be the only legal tender in their own territories.

“*Fifthly.*—Attempts might be made to induce foreign States which had Mints of their own to assimilate their coinage with ours in intrinsic value. This might be easily effected in States which are completely under our influence, such as Lahore, Gwalior, Indore, and Jeypore, but it should be done entirely by influence, and without pecuniary aid. The gratuitous offer of assistance either in the assay or mintage would cheapen the coin and encourage its production. The resemblance also should not extend further than to intrinsic value; soft silver is preferred in native Mints because it can be easily worked. It also wears more rapidly and is more likely to be melted down for use. These circumstances add to its expensiveness and facilitate its withdrawal from circulation.”

The number of copper pice annually imported into the North-Western Provinces between 1838 and September, 1848 was

8,63,000 Rs. worth, which is an average annual importation of 1,07,875 rupees worth.

Administration of Shahjehanpore.—This paper dated 6th December, 1847, consists of memoranda on Tuccavee Balances, Talooka Kundhur, Tenure of Kuttras in Shahjehanpore, Moostajuree Villages, Forest Round and Biswahdarrce Tenures in Talooka Powain.

The Tuccavee balance account should be settled with the least possible delay. No refunds should be allowed, publicity should be given by general proclamation and by an acquittance to each Malgoozar, and in future the Tuccavee balances should be annually reported as are the Mal balances.

Kundhur is the name of a large Talooka, inhabited by Chundele Rajpoots. The settlement proceedings at the date of the memorandum had not been carried out, and Mr. Thomason discusses the best means for effecting peaceably the settlement.

In the town of Shahjehanpore are several clusters of buildings called Kuttras, some of which are rent-free, and others pay a certain Russoom to Government. Such houses cannot be altered, pulled down and rebuilt, changed from kuchah to puckah, or from a shop to a dwelling without the consent of the proprietor, who on such occasions receives a fee or a fine, or makes a new bargain. The system leads to all kinds of speculation and oppression. It is proposed therefore to commute the leasehold tenure into the fee simple of the land. A good title should be given by conferring a Sunnud and a map specifying the extent and boundaries of the land. The money collected from these sources should be thrown into the municipal fund.

There are about fifty-seven villages in Shahjehanpore in which Moostajuree settlements have been made. Estates so settled are neither heritable nor transferable. The Collector should decide who is the proprietor. The Moostajur is believed to be the proprietor, when the Moostajur is not the proprietor, it is probable that there is no person absolutely entitled to the proprietary right, in such a case it may belong to Government and should be transferred.

In Shahjehanpore part of the forest land has been settled with the Zemindars, and part reserved to Government. It is necessary to fix the limits of the land so settled. The forest land reserved to Government may be divided into parcels not less than 4,000 acres each and sold. The purchaser may be held to carry complete possession of wood, grass, and of every thing attaching to the land.

The settlement proceedings in Powain were conducted with much haste and are therefore defective. The memorandum sug-

gests the mode in which enquiry into such settlements should be made.

Administration of Pergunnah Jounsar in Dehra Dhoon.—The settlement of this Pergunnah was made in 1835 for fifteen years, and was about to expire when Mr. Thomason wrote the memorandum. The Government demand was fixed at Rs. 20,000, and for this the whole Pergunnah was responsible. The assessment is very light. The total assessment was distributed by the Chowntroo or standing Committee of four headmen over the thirty-five khuts or circles into which the Pergunnah is divided. The Seeanahs or headmen of each khut distributed the quota over the villages in their circle, and the headmen of the villages over the resident cultivators. The chief points to be determined are:—"The Chowntroos—how chosen—on what terms holding Office—possessing what powers—how exercising their functions—how liable to be called to account for misconduct—in what cases authorized to charge the Pergunnah with their travelling expences.

"The Seeanahs—how chosen—how holding Office—possessing what powers, and subject to what liabilities in their persons and in their property. There is reason to believe that 5 per cent. on the Government demand, which these Officers now receive, is sufficient remuneration, and is even more than they elsewhere are entitled to."

The distribution of the assessment should be carefully superintended, for the Chowntroos, Secanahs and other influential men, will always be inclined to throw the weight of the assessment off their own shoulders upon their weaker and poorer neighbours; and the principle on which the balances are to be realized should be recorded.

Proprietary Right in Rohilcund.—"Previous to the acquisition of the province by the British, proprietary right in land seems to have been weaker in Rohilcund than in most other parts of the North-Western Provinces."

By continual invasions the old Hindoo village institutions had been generally subverted and their lands suffered to fall waste. When the British first acquired the country, the greatest mistakes were made by men imbued with the notions prevalent in Bengal in the time of Lord Cornwallis. Hence a proprietary title was frequently acquired by persons who had no right to it at all. The proceedings prior and subsequent to the enactment of Regulation VII. of 1822 corrected some of the errors, but many still remained. The effect of the settlement under that Regulation was, however, to give an increased value to land. But, inasmuch as mistakes were committed, it is use-

ful to notice some general principles, which it is important to keep in view with regard to all suits in the Civil Courts to contest arrangements made by the settlement officers.

First.—The claim is to stand or fall on its own merits and not on the conduct of the Settlement Officer.

Secondly.—The onus probandi in the Civil Suit rests with the plaintiff.

Thirdly.—Revenue officers should be permitted to advise and assist parties so as to enable them to bring their cases fairly before the Courts.

Embankments for Irrigation in the Delhi District.—The neighbourhood of Delhi is well suited for the construction of tanks and reservoirs for irrigation. The tract of country which extends from Nujjufgurh Jheel to the Jumna is that where such works can be best constructed and are most needed. The tract has been the site of a dense population and is covered with the ruins of former great and wealthy cities. Feeble and desultory efforts have been made by the local Officers to restore two of the old embankments situated near the villages of Klirkee and Clutterpore. Good has resulted from even such efforts, and the remains of other old embankments if restored would be most valuable in extending and improving the cultivation. It remains to consider the mode in which Government is to be repaid for the expence of these works. The settlement of all the villages which will benefit by such works has been completed up to 1870. Till that time arrives the Government will not be able to enhance its demands. In the theory of the revenue system it was intended that works of this kind should be undertaken by the people themselves. But this expectation is vain, they possess neither capital nor enterprise. The design must be matured, the capital advanced and the greater portion of the risk must be borne by the Government, which will find its return in the greater security of the present revenue, in the prospect of future-enhanced revenue and in the increased wealth and prosperity of the people. It will be sufficient if the people contribute enough to pay the ordinary interest of five per cent. and the cost of ordinary repairs. The established rate of four annas on the beegah of 3,025 square yards, for all land submerged by water, will effect this, but the people would not object to pay 6 or even 8 annas. The agency for carrying out the operations is the great difficulty.

Sub-Assistant Civil Engineers.—The Government have long been anxious to raise up a body of Native Civil Engineers. To effect this object it would be advisable to bring together natives engaged in public works and

15th February, 1848.
17th January, 1845.

possessing practical knowledge, but deficient in scientific skill, and natives of high mathematical attainments educated at the Agra and Delhi Colleges, destitute of practical skill, under the supervision of an officer of talent and experience. By this means instruction might be readily afforded and if a liberal scale of remuneration be awarded to natives, who, being declared competent, become Sub-Assistant Engineers, a very valuable class of public servants might be reared.

The Eastern Jumna Canal.—Mr. Thomason's minute directs the attention of the local Officers to the following points:—

"The re-survey and rectification of the line of the Canal in the Central Division, and the removal of the bar of clay at Shamli.

"The drainage of the Gundowra and other Jheels, and the prevention of the accumulation of water near the Canal banks, together with the complete drainage of Shamli, and the formation of the Tunnel near Bynswal.

"The increase of boats and their employment for the carriage of passengers and merchandise, together with the introduction of improved appliances for agriculture through their means.

"The introduction of improved water wheels for grinding corn, and the employment of water-mills for other economical purposes.

"The addition of Ghats and drinking troughs or reservoirs for cattle to the bridges, and their formation at all convenient spots.

"The extension of the grafted mangoe plantations.

"The improvement of the system of charging for irrigation and of collecting the water rents.

"The formation of a complete map of all the land susceptible of irrigation by the Canal.

"The transcription and arrangement of all working plans, memoranda, &c.

"The education and moral improvement of the subordinate Officers on the Canal Establishments."

With regard to the collection of water-rent, Mr. Thomason thinks that it should be transferred from the Canal Officers to the Collector. He proposes this, firstly to free the landed proprietor from the double demand, secondly to secure to the Canal Officers greater time for guarding the works and distributing the water, and thirdly to prevent quarrels between the Canal Officers and contumacious and litigious proprietors.

in Delhi and Rohilcund.—The despatch on this subject is dated the 28th March, 1848, and its summarisation would not need be useful.

Summary Awards by Revenue Officers.—It is expedient to declare the limits within which a regular suit may be brought against the summary awards of revenue officers. It is therefore proposed that such suits shall be restricted to the period of one year from the date of the original proceeding of the officers making the award

30th March, 1847.

Right of Pre-emption and Record of Mutations.—It is the province of the Collector to register mutations which have taken place, and not to decide whether they should take place. In practice, people effecting transfers apply to the Collector before the transfer is complete as a device for ascertaining whether opposition will be raised to it. If the transfer takes effect the mutation of names is made, but if the transfer is successfully resisted no mutation of names takes place.

4th April, 1848.

Slaughter of Kine.—Hurdwar is esteemed a sacred spot. To slaughter kine within its limits would be very offensive to the Hindoos. Kine were therefore permitted to be slaughtered at Jowallahpore near Hurdwar. As the climate of Hurdwar is insalubrious, many Brahmins who resort to Hurdwar for the performance of religious votes reside at Jowallahpore. They therefore petitioned against the slaughter of kine and sale of flesh at that place. Accordingly in 1813 the Magistrate declared Jowallahpore a part of Hurdwar and forbade the practice. On this Mr. Thomason rules that the slaughter of kine is not in itself a crime, their open slaughter becomes, however, criminal when it provokes a breach of the public peace. It may be difficult to retrace the false step of the Magistrate of Jowallahpore, but he should protect the butchers from all persecution and violence.

5th May, 1848.

Establishment of a Military Board in the North-Western Provinces.—In a letter already summarized, Mr. Thomason proposed that the public works in the North-West, with the exception of the Ganges Canal, should be under the management of the Engineer Officer attached to the Revenue Board as a second Secretary and having the power of a junior member. The same proposition is here again brought forward, with the provision that there should be an entirely separate agency of Local Executive Engineers for Civil Works. The proposal concludes with a memorandum by Lieutenant Colonel Abbott on the subject.

10th September, 1847.

Revenue Administration of 1846-47.—The memorandum was written on the 25th September, 1848. It lays down the important principle. "That in these provinces sales for arrears of revenue are only resorted to in special cases when a particular end is to be attained, such as the restoration of old proprietors, the creation of a good title, the punishment of a refrac-

tory community, or the ascertainment of the market value of an estate the real assets of which appeared doubtful. The result of the sales cannot therefore be received as any fair criterion of the value of land, as may be in some degree the case in Bengal, where they are the primary and ordinary mode of realizing the land revenue of the Government."

Joint Responsibility of the Coparceners in Putteedaree Estates.—

No date given.

When a body of men remain voluntarily associated for the joint management of an estate, and one of them falls in balance, the whole body are liable. Mr. Thomason shows the system to be in accordance with the feelings of the people, thinks that it promotes self-Government and works well. The maintenance of the joint responsibility of the community should therefore be considered in the sale, and exceptional cases should be treated on their own merits. Mr. Thomason in a letter dated the 30th December, 1848, again discusses this important question, and publishes his views in a concise form as a circular order.

Settlement of Bandah.—"This district has long been the

23rd October, 1848. source of much anxiety to the Government.

Many circumstances connected with the district required that, from the first commencement of our rule, it should be managed with much moderation and care. The soil is very fertile, but the produce varies greatly from vicissitudes of season, owing to the difficulty of artificial irrigation. The people are a bold and spirited race, surrounded by petty independent and warlike States, and having in their immediate neighbourhood a hilly country abounding in strong positions. The tenures of land are more than ordinarily complicated and difficult of comprehension.

"The cautious treatment required by such a state of things has unfortunately not been followed. The first assessments were apparently fair and moderate, but in 1815-16 the Government demand was very unduly raised in consequence of a fictitious state of prosperity occasioned by reckless speculation in some of the staple articles of produce."

A vain attempt was made to realize this demand, till in 1829-30 the settlement was annulled and the district held Kham. In 1841, Mr. Wright was appointed to revise the settlement, and he completed his task in 1843. It was deemed inexpedient to confirm his settlements, and in 1845, Mr. Rose was therefore appointed as Collector of the district. Mr. Rose's settlement was found too high and the jumma was again reduced. It was hoped that this measure would have a beneficial effect in the district, as over-assessment always demoralizes a people.

Transfer of the Rights of Defaulting Putteedars.—Between the two causes of default, deficiency of assets, and embezzlement of proceeds, there should be careful discrimination. “In the

22nd January, 1849 &
26th October, 1848.

latter case it may be perceived that the Puttee would be profitable. The coparceners are security for each other's honesty, and until they release themselves from this liability by a partition, it is equitable that they should be made sensible of the obligation. It is only when the amount of the embezzlement exceeds the value of the Puttee, and the coparceners are too poor to make good the deficiency, that the policy of the measure can be questioned. If deficiency of assets be the cause of default, the Putteedars are equally liable in law and equity; the policy of holding them bound by that liability is a question for careful examination and consideration in each case; but to assume in all cases the impolicy of enforcing it is to act on a foregone conclusion. It is impossible to discard the obligation without at once altering the whole of the system of Revenue administration, and renouncing the principle on which the settlement has been formed.”

By law the joint responsibility of proprietors can only be dissolved by a division of the estate. The farm of the Puttee of an undivided estate should therefore not be given.

Memorandum regarding the preparation of a Map of the Grand Trunk Road, North-Western Provinces.—The memorandum possesses no pretensions to geographical accuracy and need not here be summarised.

Rights of Under-Tenants in Jounpore.—“Under-tenants may be divided into three great classes:—

27th March, 1849.

“*First.*—Subordinate proprietors who are possessed of an heritable and transferable tenure.

“*Second.*—Mouroosee Cultivators, possessing a tenure heritable but not transferable, and the rent of which is liable to enhancement only in certain cases.

“*Third.*—Tenants at will.

“It is the second of these classes, whose rights are now more especially under consideration.”

The second tenure is usually called Mouroosee, Chuppurbund, Khodkasht, &c. This right terminates in such lands as the tenant ceases to cultivate. The cultivators have a right of occupancy only so long as a certain rent, or a rent determinable on certain principles according to local rates and usages is paid. There is no provision of the law which declares these rates unalterable. Rents in India, as every where else, are liable to variation according to the general economical principles which govern the relations between landlord and tenant. The only legal proviso is that in no particular instance should a rate be

demanded in excess of that which is usual. It would be impolitic to amend the law, as such a course would diminish the power of the proprietor over his estate, but sales should be discouraged as they are opposed to the feelings of the people and are often brought about by fraud and collusion, it only remains therefore temperately to arbitrate between the proprietor and his tenant when they appear in active opposition to each other. This duty the Collector is generally able to perform, if he possess the prudence and the patience which are essential to success.

Excise and Customs Duties in the Punjab.—The paper on this subject consist of a carefully prepared memorandum by Mr. J. H. Smith and a minute of Mr. Thomason's on that memorandum. It is proposed that the salt duty throughout the country should be equalised, and that the Bengal rate Rs. 2-8 a maund should be adhered to, the special salt line below Allahabad will not then be necessary. The North-West frontier line should be changed and pass by Futtehabad, Batinda and Kote-ka-poorā, direct to Ferozepore, instead of making a circuit through the Bhutty territory by Mullote. If a preventive line is to be formed down the Sutlej to prevent the introduction of the Rajpootana salts, the right direction would be to Fazilka in the Purgunnah of Wuttoo on the Sutlej. The gain that would result from these measures would be Rs. 13,84,699, the loss would be Rs. 5,27,894. There would thus be a nett annual gain of Rs. 8,56,805

Khoud Kasht Asamee.—In ousting a Khoud Kasht Asamee from his lands two courses are to be pursued. 4th January, 1849. In the case of a person possessing any limited interest between the cultivator and the plaintiff, the latter shall on obtaining a decree in summary suit be at liberty to cancel the lease of his own authority. In the case, however, of a Khoud Kasht ryot the law designs greater indulgence, which indulgence is the opportunity of paying up the sum within a reasonable time, on demand, subsequent to adjudication.

Suggestions on certain Draft Acts.—This memorandum is dated the 14th February, 1850, and refers especially to trial by Jury. Mr. Thomason says :—

“The people of these provinces are deficient in the independence of character, the honesty of purpose, and the intelligence, which are necessary for the efficient working of such a system.

“The rich and intelligent will be averse to the duty, because it will infringe on their leisure and disturb their ease, and because, constituted as our Courts now are, it is impossible to require of them that consideration and courtesy, either from the presiding Judge, or the people at large, which is necessary to render possible the gratuitous discharge of a responsible public duty.

"The time has not yet come, when public opinion exercises such influence over Judges as to ensure their always maintaining that demeanour which is essential to the successful working of the scheme, and which all authoritative rules are utterly unable to provide. Every man's experience will point to persons holding judicial appointments, who, though high-minded, honorable, and very useful public servants, are yet disqualified by some defect of temper from beneficially using the power entrusted to them by this Act. Native Jurors would patiently bear, but acutely feel, discourtesies or offences, though even unintentionally committed. They would show no resentment, but the dislike to our Courts would be deeper seated and more generally felt even than it now is. Irreproachable conduct, and high respectability, would cease to secure exemption from the annoyances attendant on our system.

"The mode of trial, which would be established by the Draft Act, is but in name, 'Trial by Jury.' It differs so materially from the British Institution which is so denominated, that the one cannot stand in the place of the other. Few Englishmen would consider it a privilege that the issue of their trial should depend on the verdict of five Jurors chosen under the Act, rather than on the opinion of an English gentleman of similar feelings with themselves."

Opinion on Act for the Improvement of Towns.—"The funds
16th February, 1850. appropriate for the desired purpose once existed. The town duties were cheerfully paid, and were amply productive. With some alterations in the articles taxed and the mode of levy, the objections, which necessarily attach to this mode of taxation, might have been considerably reduced. In an evil hour, they were swept away without the provision of an equivalent. The good of the people would have been more consulted if the tax had been maintained, and the proceeds devoted to their use. The Chowkeedaree tax might then have been abolished, and the people would have been grateful.

"If then it is desired to raise funds for municipal purposes in the mode least offensive to the people, this may be best effected by the cautious revival of town duties. This at least might be one of the methods of self-taxation left to the discretion of the Commissioners appointed under the Act. It is the usage in almost all cities on the Continent; it is the usage in the city of London itself, which could not have had its bridges, and many of its most splendid monuments, without taxing the importation of its coals. There is no reason why, in the indiscriminate zeal for freedom of trade, the people of this country should be precluded from raising their own funds in a mode to which they

have little objection, and which is practised by other freer and more civilized nations than themselves."

Subscriptions for Public Purposes.—Under this head may be summarised Mr. Thomason's remarks on the 30th April, 1850. native subscriptions for the Shahjehanpore Dispensary.

"When a man, in Office himself, heads a subscription list, recommends to others to contribute to the same object, and employs his servants or his friends and dependants in collecting the money subscribed, he beneficially exerts his influence.

"Every public Officer is undoubtedly deserving of severe punishment, who unduly favours those who respond to calls of this nature, or who visits with punishment or official displeasure those who refuse him their co-operation. Partiality and injustice need at all times to be vigorously repressed, whatever be their promoting causes. It is possible to conceive that a well-principled and conscientious man may be led by his ardour in the pursuit of some evidently beneficial object to lose sight of the limits of a just moderation. But the Lieutenant-Governor cannot at present call to mind any instance where official influence has been thus abused. There is certainly no proof of it in the Shahjehanpore case, which gave rise to the present correspondence. It seems unwise to direct a general and public warning against an abuse of power that is only possible and hypothetical.

"Much as the Lieutenant-Governor admires the noble and self-denying spirit which is sometimes displayed by our Civil Officers in the promotion of works of public utility, he sees reason to apprehend that the want of this spirit is more often to be deplored than its redundancy.

"It is therefore much to be apprehended that any general circular instructions of the nature recommended would be liable to misconstruction. Zealous public servants would feel disheartened,—the idle and remiss would rejoice in an excuse for their inaction,—the more generous and public-spirited citizens would fear the imputation of unworthy motives in their generosity,—the avaricious and mean-spirited would be glad to shelter themselves under the shadow of high authority. It will be better to meet individual instances, as they arise, with such comments as the particular features of the case may call for."

Mutation in Malgoozaree Register.—This memorandum discusses the general principle of holding malgoozars to their engagements against their will, and concludes with a Notification which, it is hoped, will remove many of the objections, that men of rank or capital entertain to holding land in their own names.

22nd July, 1850.

Roorkee Instrument Scheme.—The letter is dated the 29th July, 1850. In this Scheme there are three objects to be kept in view:—

“*First.*—The formation of a depot of efficient instruments obtained from Europe for the ordinary purposes of surveying.

“*Secondly.*—The manufacture of the simpler instruments and articles, which can be readily made in this country.

“*Thirdly.*—The repair of all instruments wherever constructed.

“For these purposes it will be necessary to erect a suitable building, and to have a small establishment of properly qualified persons.”

Punctual Submission of Accounts by Collectors.—The Collectors
15th October, 1844 are ordered to make such arrangements as will check, adjust, and consolidate Mofusil accounts, which for the sake of expedition must be all sent in by a certain date. The names of those Officers who fail to submit their accounts at the right time are to be forwarded to Government. In a subsequent letter dated the 21st February, 1845, Mr. Thomason remarks that the Collector and not the Head Clerk is the person responsible to Government for the right preparation of the accounts. Registers of the receipts of the monthly accounts from the several Zillahs should be kept by the Accountant of the North-West Provinces.

Claims for Landed Property in Coparcenary Estates.—There are
12th July, 1850 many questions regarding the rights in Coparcenary tenures liable to be brought under the consideration of the Civil Court. It is necessary therefore that the Court's rules should be accurate and extensive, embracing all the cases that may arise. All tenures are divided primarily into Zamin-daree, Putteedaree and imperfect Putteedaree. The Board of Revenue define a pure Putteedaree tenure to be the same as Bhyachara, where the whole land is occupied by the proprietary brotherhood, and revenue assessed by a rate or bakh. But this definition is only applicable to that class of Putteedaree estates in which the land is divided according to local custom. In many cases the basis of the division is ancestral right and each sharer pays his jumma conformably with the land and not according to the rate. Again, estates where the profits are distributed according to local custom may be Zamin-daree, imperfect Putteedaree or Putteedaree. There is therefore a double inaccuracy in identifying Putteedaree and Bhyachara Mehals. Again the Board define a pure Zamin-daree Mehal as one where the whole land is occupied by non-proprietary cultivators, who pay rent to the proprietors. The real test of a Zamin-daree estate is not whether the land is occupied by non-proprietary cultivators, but the

mode in which the proprietors collect and divide the profits. "It may be that all the cultivators are non-proprietors who pay rent to the proprietors, and yet these non-cultivating proprietors may have divided the land amongst them, and made the Mehal Put-teedaree. Again, the cultivators may be all Proprietors, who pay according to certain fixed rates, each man for his own cultivation, throw the whole into a common stock, and divide whatever surplus remains, after payment of the Government Revenue and the village expences, according to their ancestral shares. This would be a pure Zumdaree Mehal, but would not come under the Board's definition."

These inaccuracies of definition throw all the rules of the Sudder Dewanny Adawlut into confusion, accordingly a Draft of Rules for bringing suit, in Coparcenary Mehals is appended to Mr. Thomason's despatch.

Maintaining or Repair the Grand Trunk Road.—This subject has been discussed in a previous memorandum, the present letter is dated the 15th September, 1815.

Joint Stock Banks in the North-West Provinces.—The memorandum is without date, but from internal evidence it was written in June, 1817, at that time the following Banks were in operation:—

"I.—The Agra and United Service having its head-quarters at Agra.

"II.—The North-West ditto ditto Meerut

"III.—The Delhi ditto ditto Delhi

"IV.—The Simla and Umballa ditto ditto Simla.

"V.—The Cawnpoor ditto ditto Cawnpoor.

"VI.—The Benares ditto ditto Benares"

The Agra and United Service Bank, shortly after its commencement, established branches at Calcutta, Madras and Bombay, subsequently a branch was established in London. As regards Calcutta and London the example of the United Service Bank was followed by the North-Western Bank, which has likewise a branch at Mussoorie, the cradle of the institution; the head-quarters of which were subsequently transferred to Meerut. With the exception of the Simla Bank which established a branch at Umballah the remaining Banks have no branches. The following table shows the date at which each Bank commenced operations and the capital at first proposed and subsequently paid up:—

Name of the Bank.	Date of Establishment.	Capital at the commence-ment.	Paid up capital on 1st July, 1846.	Advertised capital for 1st July, 1846.
Agra and United Service,	1st July, 1833,	5,00,000	60,00,000	70,00,000
North-West,	1st Jan., 1814,	5,00,000	23,22,813	30,00,000
Delhi,	1st Oct., 1814,	12,00,000	16,00,000	21,00,000
Simla and Umballa, ..	19th Nov., 1814,	5,00,000	8,00,000	12,00,000
Cawnpore,	1st May, 1815,	5,00,000	10,81,000	20,00,000
Benares,	1st Aug., 1815,	5,00,000	5,00,000	12,50,000
Total, ...		37,00,000	1,23,03,813	1,65,50,000

Besides the capital of the Banks they have large available fund-, as is exhibited by the accompanying table:—

Name of Bank.	Amount of deposits on 1st July, 1846.
Agra and United Service,	38,12,282
North-West,	10,70,221
Delhi,	4,21,750
Simlah,	1,26,011
Cawnpore,	1,15,049
Benares,	47,517
Total,	55,92,860

The deeds of Copartnership of the first four Banks are very similar. They declare that their business shall consist in the purchase, sale, and negotiation of bills of exchange, in discounting bills and notes, in lending money on the security of individuals, and of personal and real property; in granting cash credits, in purchase and sale of coin, bullion, and Government securities; in the receipts of cash at interest; in money agency; and any other branches of business commonly carried on by Bankers. The aggregate sums advanced on mortgage of real property are restricted to one-fifth of the subscribed capital of the Bank. The deeds also declare that the Company shall not engage in trade, or purchase any real estate or merchandize. The deeds of the Cawnpore and Benares Banks vary by not having the restrictions regarding the loans on real property, the engaging in trade, and purchase of estates and merchandize. All the Banks are managed by a Secretary under the control of Directors who meet twice a week and act gratuitously. All the Banks limit the number of shares to be held by one individual. The Agra, and North-West Bank's limit is 400, the Delhi's 200, the Simla's 100 and the Benares', one-fifth of the whole capital.

The shares are Rs. 500 each, in every Bank except Cawnpore, where they are 1000. There must be half-yearly meetings of the shareholders, the accounts must be balanced at least twice a year, and no share can be transferred without the consent of the Directors. The Proprietors in the several Banks may be thus classed :—

	<i>Hundredths.</i>
The Military shareholders represent,	62
Members of the Civil Service ditto,	8
Uncovenanted Service ditto,	8
Europeans engaged in trade,	6½
Natives,	5
Individuals not classible under either of the above heads,	10½
Total,	100

These proportions apply to the shareholders numerically. If the number of the shares were considered, the interests of the Civilians in the capital subscribed would bear a much higher ratio. In the opinion of Mr. C. Allen, the Banks have not nearly gone far enough in promoting the development of the resources of the country. They do not assist merchants, planters, and others to the extent they should, but loan their money to the services. Some of the banks issue notes, so that provision of bullion on this account is not called for. In fact the sums that can, at any time, be immediately called for, are comparatively inconsiderable, and for them provision is always made. In India public opinion and usage are so little in favour of Bank-notes that there would be very small danger in their issue. In conclusion, the memorandum remarks, that all the Banks wish for a legislative enactment enabling them to sue and be sued in the Civil Courts. They moreover are desirous that a registered mortgage should take precedence, at law, of all other mortgages. The foregoing memorandum thus summarised was written by Mr. Allen and transmitted to Mr. Dorin by Mr. Thomason with remarks. He thinks that the Banks exercise a good moral effect on the members of the service, promote habits of economy, and enable many persons honourably to extricate themselves from difficulties. The servants of Government should not be excluded from their management. The duties are not onerous and the knowledge acquired is most useful.

Water Mills for Grinding Corn on the Dhoon Canals.—The Government has the control over natural running streams throughout the country, wherever it has not waived the right by special or implied contract. In

the Dhoon this right was specially reserved, but is to be exercised only for the good of the people. Therefore no obstruction should be placed to the erection of native mills for grinding corn, were such mills do not impede Government works or render the water turbid.

Settlement of Pergunnah Beesulpore, in Bareilly.—In this Pergunnah settlements had been made with certain persons as farmers for a term of years. The Civil Court ordered the sale of other rights and claims not possessed by such farmers. Such an order did not justify the annulling of the existing leases. But the farmers themselves claimed the rights offered for sale. Fresh enquiry should therefore be made in each case. The letter we have summarised was written on the 6th October, 1847, and on the 21st January, 1850, Mr. Thomason was of opinion that no clear proof of a proprietary title had been adduced by the several claimants and complimented the Officers who had carried out this very laborious investigation.

Experimental Cultivation of Cotton.—The first steps towards the experimental cultivation of cotton were taken in 1846. The experiment however was incomplete. Measures were commenced at too late a period for the cultivation of more than one kind of cotton and the consignment was made up by the purchase of foreign cotton. Simultaneously with the exertion to improve the growth of cotton great efforts were made to improve and cheapen the several processes of cleaning, packing and dispatching the cotton. The American saw-gin failed in the North-West, but there was good reason to believe that improved machinery on the principle of the native "Churkahi" would both cheapen and improve the process of cleaning. Iron screw presses have been established at Agra. The Lieutenant Governor was desirous to establish agencies in India for the supply of cotton for export. When such agencies were in operation he thought the Government should retire from the field.

Suits to contest Sales in Talookah Budlapoor in Zillah Jounpore.—The memorandum, dated the 13th March, 1848, is merely of much interest.

Hereditary Pensions.—Hereditary pensions held in Benares under Section 3, Regulation XXXIV. 1795, 27th March, 1848. in the Ceded and Conquered Provinces under Section 2, Regulation XXIV. 1803, are of the same nature. They are not liable to resumption, and are, in all respects, considered as property. As regards hereditary pensions held under the former Regulation no question can arise. But the same certainty does not exist regarding pensions held under the latter Regulation. Further information is therefore desired.

“First.—As to the means which exist for discriminating between pensions, said to be perpetual, which are claimable under Section 2, Regulation XXIV. 1803, and which are not so claimable.

“Secondly.—As to the terms on which pensions claimable under Section 2, Regulation XXXIV. 1795, and Section 2, Regulation XXXVI. 1803, can be purchased, and the expediency of doing so.

“Thirdly.—As to the terms on which other pensions said to be in perpetuity can be equitably compounded, and the expediency of doing so.”

Survey of Ajmere and Mhairwara.—The paper is dated the 28th March, 1848. Lieutenant Vanrenen by whom the survey was conducted. To the letter are appended instructions for the formation of the Village Settlement of Ajmere. There is also a letter dated the 25th April, 1850, addressed to Lieutenant Colonel C. G. Dixon, the Superintendent. To that date the irrigated land bore but a small proportion to the unirrigated. The total irrigated was acres 30,682, whilst the unirrigated amounted to acres 1,69,511. It was thought therefore that the assessment might be found higher than the country could readily pay. At the same time, the Lieutenant Governor allowed weight to certain remarks contained in a former letter of Colonel Dixon, and trusted to his intimate knowledge of the people. He therefore confirmed Colonel Dixon's assessment for the period of twenty-one years by which the total demand of Government was Rs. 1,77,519, of this sum the tulao fund contributed Rs. 4,537, and the road fund Rs. 1,763. The tulao fund consisted of one per cent. on the expenditure upon bunds, the produce of fallen or decayed timber trees grown on the embankments and a water-rent levied on all Jageer lands irrigated from the reservoirs. There should be in each Mouzah an Officer responsible that the water courses and reservoirs are kept in full repair, and his emolument should depend on the extent of irrigated land. A Pergunnah Officer should be responsible for the Village Officer and over all should be a District Officer. The road fund is quite inadequate to the wants of the district and therefore all holders of land should be bound to furnish labourers to keep the roads in repair. There is another letter to Colonel Dixon dated the 20th November, 1850, in this collection.

Right of Pre-emption, and Record of Proprietary Mutations.—The Collector has no power to disallow the mutation of names, if the transfer has actually taken place, nor to cause it to be made, if there is any obstacle to the transfer. The functions of the Collector and Civil Court.

in the transaction are perfectly distinct. The Civil Court is called in to effect that which the Collector cannot bring about or prevent; namely, the transfer of the property from the seller or the purchaser, notwithstanding the opposition of the coparceners.

Land to be appropriated on the Sides of the Grand Trunk Road.—The letter is dated the 22nd August, 1848, and rules that a road for general traffic should be thirty feet broad. In addition to this, a clear space for slopes and berm of forty feet on each side is required; and beyond this there should be excavations, of such width as may be requisite, but limited in depth to two feet. When however the road passes through valuable ground exceptions must be made and unnecessary sacrifice of property avoided.

Retrospective Demand on account of Alluvion.—The demand of the Government may be resisted only on two grounds; 1st, that the land from which it is claimed is part of a settled estate; 2nd, that the alleged collections by the Zemindar were never made. The Zemindar cannot of course be compelled to agree to the retrospective settlement. If he refuse to enter into it, he continues liable to the demand retrospectively, say the actual collections less ten per cent. and the amount may be recovered in the usual manner. But if he agrees to it, he cannot claim annulment of the contract, simply because it is retrospective.

Mint at Lahore.—This paper was written when it was proposed to withdraw all foreign coin from circulation in the Punjab and replace it by Company's Rupees. The paper need not be here summarised as it is improbable that a like case should occur again.

Demarcation of Boundaries in the Sangor and Nerbudda Territories.—In those territories a Mouzahwar settlement was made without any precise determination of the limits of each Mouzah. Thus both parties to the contract were ignorant of the primary element in the value of the lease; viz. the extent of the land leased. The Lieutenant Governor therefore urges the Supreme Government to declare the extent of the land on which their demand is fixed, and the parties in whose favor they have imposed the limitation on their own share of the profits.

Talookdaree Allowance in Talookah Jharkee, Zillah Agra.—"The question which is propounded for consideration may be thus stated. In a Talookah, where a settlement has been made with the Biswahdars, and a Talookdaree allowance exceeding 10 per cent. of the total demand on the Biswahdars is assigned to the Talookdar, without any specification of the period for which such assignment is given, is the Government competent to resume any part of the Talookdaree allow-

ance on the death of the Talookdar, within the period of the settlement?" Mr. Thomason determines this question in the affirmative. For, the whole of the profit arising for the limitation of the Government demand is given to the Biswahdars, the Talookdar being no party whatever to the contract.

Revision of Settlement in Talooka Kundhur in Shahjehanpore.—The partition effected maintained the coparceners in the fields they cultivated, wherever situated. It would be an evident advantage if the fields allotted to each person were situated together. This object should be sedulously kept in view and encouragement given to its accomplishment. The best encouragement is for the Government to bear the expense of the record. But the operation is one of much delicacy. The settlement effected in Kundhur should be explained to the inhabitants. For, the thorough mastery which is thus obtained of the whole-frame work of the community, and the complete exposure of their transactions affords the readiest means of governing all village communities.

"When they despair of finding a person who understands their concerns, and will arbitrate fairly between them, they become turbulent, reckless, and unscrupulous. The anger which is aroused by their real or supposed wrongs will find vent in violence towards one another or towards strangers, or else they will seek to accomplish by fraud and intrigue that which they find themselves unable openly to attain. Demoralization and ruin follow such courses. Spirited and high-minded men thus become the pests of society. But there are no people who, when properly addressed, are more open to reason."

Forest Dues below the Kumaon Hills.—The Government assert a right to all spontaneous products from unappropriated tracts of land. In order to ascertain these rights and to regulate their levy, the whole are held kham. The forest dues are of two kinds:—

"*First.*—Those which are levied at certain points in the forest throughout its extent, such as the pasturage dues from cattle, levied at the enclosures (goths) where they are herded by night, and the dues upon chunam and catechu (Bhuttee Koyrar), which are levied at the places where these items are manufactured from the limestone and khyr trees.

"*Secondly.*—Those which are levied on the removal of the articles of produce from the forest along the usual routes; such as the dues from timber and wood of all sorts, from bamboos and wax, honey, charcoal, and lac, &c."

The former are collected by the Collector in his own boundaries and the latter partake of the nature of customs duties.

The memorandum lays down rules for the collection of these latter dues.

Memorandum on Pergunnah Bazpoor.—Pergunnah Bazpoor

has been held Kham since June, 1849.
11th February, 1851.

Most of the villages are farmed, the farmers being men of substance and giving good security. The memorandum proposes; first that Zumindaree rights should be conferred on the present farmers; second, that the jheels and marah lands should be drained and water supplied for irrigation; third, that as the unhealthiness of the climate is the great impediment to the settlement of cultivators, medical assistance should be afforded to the people and their residences should be improved.

Toufeer Lands in Moradabad.—The documentary evidence on

which the Mafce tenures in Moradabad are
12th February, 1851 held is defective. A question has been

raised whether the decree, confirming the rent-free tenure, was intended to exempt from assessment all the land held by the Mafcedar, or only such extent of land as appears in the Register to have been claimed by him at the time in his own showing. It is notorious that at the time of registration of the Mafce tenures, no measurement of the lands took place. The entries of area were made at random. It would therefore be harsh to give the Mafcedars no more than the registered area, when they are found to hold land in excess, and to refuse them the excess when they hold lands less than the registered area.

Survey of a portion of Bareilly.—This memorandum dated the 13th February, 1851, lays down with precision the work to be done by Lieutenant Vaurenen's survey in the Northern parts of Bareilly. The efficiency of the survey is not to be tested by the number of square miles surveyed in a season, but by the style of the work given in.

Boundary between Kumaon and Rohilkund.—Lieutenant Van-

renen was also to determine this boundary,
14th February, 1851 and in doubtful places, at ends of the bound-

ary line and on the side of all roads, mark the line with masonry pillars.

Assistant Executive Officers, Canal Department.—The Mili-

tary Board found themselves compelled to
7th March, 1851 propose a new organisation for the Barrack

Department of Public Works. They forgot however the peculiar circumstances of the Canal Department and worded their proposal so as to embrace its establishment. This oversight should be confessed and the Resolution of February 22nd, 1850 declared inapplicable to it.

Supply of Grass to Cavalry.—The system in vogue for supplying

grass was, in March 1851, the date of this minute, to maintain grasscutters at Rs. 3-8 a month, and to send them out to cut grass, where they could. Great evils are attendant on this custom. The grass-cutters are often insolent to the Zumindars from whose lands they procure forage. The ponies of the grass-cutters damage the crops, and there are in consequence constant altercations between the grass-cutters and the people and between the Civil and Military authorities. The foraging system should be renounced altogether, and hay or grass should be bought in the bazar, such a system can be pursued and contractors readily found at a trifling cost above the present average.

Index Map.—An Index Map is designed to connect together all the District Maps, to shew their mutual relation and to give their leading features. In 31st March, 1851. such a map, the G. Trig. Survey should be omitted, as likewise all but the great roads and rivers. The Pergunnah boundaries should be inserted.

Landed Property in Jounpore—In Jounpore uncertainty at present often attaches to. 26th May, 1851. “*First.*—The amount of the Government demand from an estate.

“*Secondly.*—The rights of the coparceners in joint estates.

“*Thirdly*—The rights of the under tenantry, who are not under engagements with the Government in their own persons, or through their representatives.”

To clear up this uncertainty enquiries should be made, but they must be conducted with judgment. Facts which are merely recorded and points which are determined must be kept distinct. As the object of the measure is to give security and not to assert the long dormant or doubtful rights of Government, great care must be taken to avoid making these enquiries the cause of exciting rather than of preventing litigation. The work should be proceeded with leisurely as a long file of unadjusted cases would be a serious evil.

Enhancement of Rents.—Claims to enhanced rent, under the provisions of Regulation V. 1812 can only be 30th June, 1851. heard in a regular suit, when the defendant has full opportunity of pleading, in bar of such claim, any right which he might possess founded on the act of the former proprietors. A proprietor has the right under certain circumstances to raise the rent both of hereditary-privileged cultivators and of tenants at will, the former recouling to established usage and the Pergunnah rates, the latter according to his will and pleasure.

Prosecution of Works on the Ganges Canal.—On the 1st May, 3rd July, 1851. 1847, the Court of Directors determined, on an

estimate furnished by Lieutenant Colonel Cautley, amounting to one million sterling to construct the Canal. As soon as the works had sufficiently advanced, Lieutenant Colonel Cautley was called upon to furnish a revised estimate. The revised estimate was submitted on the 16th September, 1850, and amounted to Rs. 1,11,29,811-7-5. The facts which influenced the designs of the works then estimated for were: 1st, the results of the proceedings of a Medical Committee, which determined that the high water mark of the Canal should be kept, as much as possible, below the surface of the country; 2nd, the results of excavation in the upper divisions, shewing the super soil clay to be only, with a substratum of sand; 3rd, the change of design in the distribution of the supply below the 110th mile. The revised estimate, according to the established usage of the department, did not include the cost of the fixed establishments maintained during the course of the work, nor the current repairs of those parts of the work completed prior to the opening of the Canal. The rest of the memorandum it is unnecessary to summarise here. Lieutenant Colonel Cautley is complimented on the beautiful mode in which the accounts are kept.

Rajbhuja for the Ganges Canal.—In the govt of Rajbhuja there are three items of expense, the cost of preparatory survey, design, and superintendence, the price of the land, and the expenditure on excavation. It is probable that the Zemindars, when apprised of the nature of the scheme will consent to the excavation of Rajbhuja in their lands, themselves retaining the right of proprietorship and not requiring compensation.

Education of Civil Engineers at Roorkee.—The necessity has long been felt of some systematic training for Civil Engineers in this country. The Western and Eastern Jumna Canals, the works for irrigation in the Dehra Dhoon, Rohilkund and on the Nujjufgurh Jheel, near Delhi, the public roads, the Grand Trigonometrical survey, the last Land Revenue Settlement all prove that for many years there has existed a large demand for skill in every branch of Civil Engineering. Efforts to supply the want were for some time made by providing the means of special scientific training, in institutions then existing. In January, 1845, Lieutenant Baird Smith undertook to train native youths in Civil Engineering at Saharunpore, and towards the close of the same year Masters for the special purpose of teaching architectural drawing and surveying were appointed to the Delhi and Agra Colleges. A class of Sub-Assistant Executive Engineers was also formed with fixed allowances and a recog-

nised standing in the public service. In 1847, Lord Hardinge determined on the vigorous prosecution of the Ganges Canal, and to provide a constant supply of well-trained and experienced Civil Engineers Roorkee College had its rise. The report contains the prospectus of the College and the course of education. By this College a considerable number of well-trained men have been furnished for the service of the State. Furthermore it is suggested in this memorandum that Officers should be permitted to study at Roorkee, the village schools within a circuit of fifty miles round Roorkee should be placed under efficient superintendence, a depot should be formed for the safe custody, and a workshop for the repair, of mathematical instruments, there should be a museum of economic geology, an observatory should be erected, metal and stone-printing presses with a book binder's establishment should be maintained, and the College buildings should be enlarged. The present establishment of teachers is inadequate for the instruction of more than the present number of students. If the number of the latter be increased the teachers must be increased in proportion. The propositions seem costly, but the minimum annual outlay in the North-West Provinces for public works must reach Rs. 58,00,000, and this large expenditure will be economically managed as skilled artificers and labourers are employed in the disbursement.

Moolkee Treasury at Benares.—The sum of Rs. 15,012-2 is annually paid to the Rajah of Benares under the heads of Moolkee Treasury, Duftur Sance and Stationery. The payment is claimed and made under clause 2 of the agreement entered into between Rajah Mahipnarain, and Mr. Duncan, Resident at Benares, dated October, 27th, 1794. Subsequent alterations, introduced by the British Government, have made the clause a dead letter as regards the administration of the province. Still the British Government is bound by its engagement to maintain the office, though such office no longer performs the duties agreed upon. If therefore the Government consent in the spirit of the convention of October, 1794 to continue a payment for which no necessity exists, the Rajah should engage on his part to surrender a right fallen into desuetude. Thus the Government should punctually pay the sum for a nominal establishment and the Rajah waive his claim to a nominal compliment.

Government Dispensaries.—There is no doubt of the great utility of such establishments, but caution is requisite to guard against their undue multiplication. The position of the dispensary should be in a place of sufficient importance as regards the sanatory wants of the place itself and its neighbourhood. The people of the place should

erect at their own cost a suitable building and contribute generally towards the well-being of the establishment. The services of a Sub-Assistant Surgeon should in all cases be available to undertake the duties.

Settlement of Nimar.—Hitherto there has been no private property in the soil recognized by Government, or claimed by individuals, for no sale or mortgage can take place without the permission of Government. Old resident cultivators possess a right of occupancy so long as they pay their rents. The pergunnah officers, Mundloec and Kanoongoc have a right to certain dues, and the village officers, the patel and putwarec, to other dues. The farmers, who have rented the villages, have no claims to proprietary rights and many have gladly resigned their leases. To remedy such a state of things, Mr. Thomason proposes to lower the assessment so as to create a valuable property in land, and confer it upon certain persons recognized as proprietors. The best persons to recognize as proprietors are the joonardars or old resident cultivators. Their proprietary rights, however, will extend over but a small extent of soil, and it will be difficult and expensive for the officers of Government to make the collections from them. The Mouzahwar system of the North-Western Provinces should therefore be introduced; with regard to the patel, under the Khalsa system it is expedient to secure his influence by allowing him five per cent. on the collections, but under the Mouzahwar system he may be dispensed with altogether. Mr. Thomason, however, does not direct, but merely suggests the introduction of the Mouzahwar system into Nimar. The Khalsa or Assameewar system affords support to a large number of subordinate officials who have thus opened to them numerous methods of interference. The three kinds of tenures it is proposed to introduce into Nimar are:—

“1st. The Assameewar, where an individual cultivator undertakes to cultivate for a fixed sum a certain plot of ground having defined limits; so long as he pays his rent, no enquiry will be made into the mode in which he manages his land.

“2nd. The Mouzahwar tenure by a community, where all the community become severally and jointly responsible for the payment of the sum fixed on their village, the profits being distributed amongst them according to some recorded local rule.

“3rd. The Mouzahwar tenure by an individual, where the cultivators continue to cultivate and to pay their rents as in the Khalsa system, but to an individual proprietor, instead of to the Collector.”

In another paper dated the 16th October, 1848, the Revenue Administration of Nimar for 1847-48 is discussed, and there is a third paper dated 9th October, 1849, on the Civil

administration of the same province. Notes are also appended on the settlement of Mundlairsir, Mooltan, Mirzapore and Balsamund in the same district of Nimar, and letters dated the 10th July, 1852, the 12th of August and the 10th October of the same year on the settlement of pergunnahs Kusrawud, Burreah and Kanapoor.

Position of Talookdars in the North-West Provinces.—The question to be decided is the position at the 24th October, 1851. next settlement of those Talookdars who waived the question of their right to engagements and received a Malikana, generally of eighteen per cent. on the jumma for the life of the first incumbent, to be, except in peculiar cases, reduced and finally fixed at ten per cent. The subject has been already discussed. It is one more of expediency and policy than justice, and the sum at stake is Rs. 85,779 per annum. Mr. Thomason urges upon the Court of Directors the speedy decision of this question.

Proprietary Rights in Farmed Estates.—It has been brought to the notice of Government that in most, if not in every, district of the North-West Provinces, Mehals have been settled with farmers, in consequence of the absence of any clear proprietary title. It is purposed to remedy the existing defects of the settlement by adjudging or bestowing proprietary titles in all farmed estates. Frequently the farmer himself will be found to have proprietary rights, if so, he should be declared at once proprietor. If he has no proprietary claims still he should be recognised as proprietor unless parties out of possession have strong adverse claims. If any farmer declines to be made proprietor, the offer should be recorded, to become effective at the decease of the farmer or the termination of his lease. When a farm has lapsed and there is no person possessed of any equitable claim to the Mehal it should be put up to public auction.

Police in the District of Allahabad.—The number of the police should be reduced and the emoluments of those retained increased. To do this, there should be a new distribution of the thannah jurisdictions, which by diminishing the number of thannahs will leave funds available to raise the pay of those men whose services are retained. That there might be with advantage a reduction of thannahs is shewn by the accompanying table:—

Districts.	No. of Thannahs.	Average population of each Thannah.	Average area of each Thannah jurisdiction in sq are miles.
Mecrut,	16	53,296	145.7
Mooradabad,	20	49,868	148.3
Bareilly,	15	76,244	195.8
Allahabad,	23	30,881	121.8

Alteration of the Course of the Eastern Jumna Canal.—The memorandum is dated 16th October, 1850, and Mr. Thomson expresses himself perfectly satisfied as to the expediency of this measure.

Map of Bluttecanah.—It is unnecessary to summarise this memorandum which is dated the 20th January, 1852. It remarks that Captain Brown's pergunnah maps for Hissar and Bluttecanah do not with any accuracy delineate the frontier line.

Lands Severed by the Ganges Canal.—"The general question of the effect of the Canal on the villages through which it passes, by severing one portion from another, is well deserving the consideration of the Revenue Authorities. Severance will, no doubt, be the cause of much inconvenience, and perhaps of loss in some cases, but these may be much lessened by the efforts of the local authorities."

Where the village is simple zemindaree, severance will merely require the formation of a new hamlet for the residence of the cultivators. Some assistance may be wanted in founding the new hamlet and a grant of money would not be misplaced. In a Puttecdaree village where the proprietors are themselves cultivators, further difficulty may be experienced. The fields of the same proprietor, or of the same puttce, may be on different sides of the Canal, and the mere formation of a new hamlet may not remedy the inconvenience occasioned by the severance. In that event, besides giving pecuniary assistance, it may be of use to persuade the proprietors to make a redistribution of their lands. These observations apply to those cases in which the two portions of the severed village are nearly equal. Where one portion is of inconsiderable size it may be preferable to effect a transfer of that small portion to another village.

• *Right of Cultivator to sublet his Holding.*—The right of a Mouroosee Ryot to sublet his land cannot be denied. He has a right of occupancy so long as he pays according to the Purgunnah rate for the land in his possession. "If from any cause, he does not cultivate the land himself, he is at liberty, sooner than throw up any portion of his land, to provide for its cultivation by others. He continues responsible to the Malgoozar for the rent of his land, and, so long as he pays it, the Malgoozar cannot interfere with him. If he sublets to a great advantage, presumption exists that the rent he pays is below the Purgunnah usage, and the Malgoozar may sue for re-adjustment and increase of rent; but he cannot summarily set aside the Mouroosee Ryot, and collect direct from the under-tenant. That would virtually be to oust the Mouroosee Ryot, contrary to the conditions of his tenure, which are continued cultivation and punctual payment of the equitable rent."

Customs Administration in 1850-51.—The net collections for 1850-51 amounted to Rs. 4,84,565, shewing a decrease of Rs. 1,193,934, under the returns of 1849-50. The gross collections for 1850-51, were Rs. 53,68,807, exhibiting a decrease of Rs. 13,99,550. Mr. Thomason thinks this large falling off in the revenue indicates no important deterioration of trade, or permanent injury to the finances of the country. The great decrease is due to the falling off in the collections from salt, amounting in one year to Rs. 15,08,037. This is in a great measure owing to the cessation of the duty on the Punjab Frontier, and the diminished consumption of western Salt on the Benares Provinces east of the special duty line. The falling off in the transport of salt, across the special duty line at Allahabad was owing partly to the difficulty of procuring boats for the transport of salt, and partly to salt from the Sambhur finding its way south of the frontier line in the Mirzapore district, and so paying no duty. The expense of the superintendence of the salt department might be advantageously reduced by the abolition of the Mirzapore Collectorship, which would make an immediate saving of Rs. 30,000 per annum. "Further than this, it is impossible to calculate on much reduction of the cost of collection. The preventive service cannot safely be weakened. The pay of the Deputy Collectors is on the lowest possible scale considering their large powers and great pecuniary responsibility: These Officers, drawn from the Uncovenanted service, have, hitherto, shown themselves extremely intelligent, diligent, and honest in the discharge of their duties. A proposal has been made for somewhat bettering their prospects of promotion, and has been referred to the Honorable

Court of Directors ; but no reply has yet been received to the application. If the Government expect to retain the zealous and cheerful services of these Officers, the hope must be held out to them of higher and more rapid advancement than that which they now have."

Memorandum regarding the Bhutty Territory.—Mr. Thomason made a tour of the territory entering it at its western extremity from Mundote to Fazilka, and thence marching by Ubohur to Mullote, and along the new route by Sirsa, leaving the district at the eastern extremity a little beyond Jodka. The new pergunnah of Wuttoo on the Sutlej, ceded in 1843, by Nuwab Bahawu Khan seemed improving. The settlement was fair and moderate, and might be sanctioned for the period of twenty years, wells and canals should be constructed in Wuttoo, and the control of the ferries over the Sutlej opposite Wuttoo should be transferred to Fazilka. The net proceeds should after this transference continue to be divided between the British districts on either bank. The Bhutty Territory east of Wuttoo and above the Dunda is a different country from Wuttoo itself, there being, with a scantiness of rain, an entire absence of all artificial irrigation. To improve the district and elevate the people, Mr. Thomason recommends an accurate registration of all rights in land, the granting of waste lands on most favourable terms, and the opening of roads. The town of Sirsa he thinks "will probably advance in wealth and importance as the country around it becomes better cultivated and more populous. The public buildings are very good, and the town is admirably supplied with all that is necessary for the protection and convenience of the people."

Arrangement of Internal Divisions in Rohtuck.—"In arranging the internal divisions of a district, it is best to begin with the pergunnahs. Taking the pergunnahs as they now stand, the following changes should be made :—

"Pergunnah Gohanuh may remain as it is.

"The following villages should be transferred from Mehim to Bhewanee, Tigree, Khoosrah, Gooskamee, Tigrana.

"The Jhujhur villages of Sye, Rewarce khera, Hursookpoora, Gudhee Sirsa, Ghogra and Phoolpoora, and the Dadree villages of Meelathul, Chang and Bomla should be considered as attached to pergunnah Bhewanee for the purposes of local administration.

"The Dadree villages of Sypul, Bound Kulan, and Khurree should be considered part of Mehim, and Annoul should be transferred from Rohtuck to Mehim.

• “The Jhujhur villages of Musaoodpoor, Ghorchee, Sereeah, and Charah should be considered part of pergunnah Behree, and to this pergunnah should be transferred Pillamee, Choochee, and Mudanah, from pergunnah Rohtuck and Agerpoor, from pergunnah Mandhoutah, Doojanah and Muhrehra which belong to the Nuwab of Doojanah should not be shown in the map.

“Pergunnah Rohtuck will remain as it is, with the exception of the villages transferred to Beree.

“Ismayaluh, Thooltunuh, Asaindah, and Asaindah Muzrah should be transferred from Kurkhonda to Mundouthee, and Mouza Seehottee from Mundouthee to Kurkhonda. Burhaee, at present said to belong to Delhi and cut off from it by the interposition of Buhadoorgurh, should be annexed to Mundouttee.

“The pergunnah boundaries being thus arranged, we may divide them into four Tuhseeldarees, and seven Thannahs, thus:—

“Pergunnah Gobanah will constitute one Tuhseeldaree and one Thannah, both situate as now at Gobanah.

“Pergunnahs Mehim and Bhewance will constitute, as now, one Tuhseeldaree, at Mehim. Thannah Bhewance at Bhewance will consist of the pergunnah as now constituted. Thannah Kalanoor will consist of the villages of Mehim lying south of Keylga, Bussana, and Mokra. The rest of pergunnah Mehim north of those villages will constitute Thannah Mehim at Mehim.

“The Tuhseeldaree of Rohtuck at Rohtuck will comprise pergunnahs Rohtuck and Beree, each of which will constitute a Thannah at the respective Kuslah.

“Pergunnahs Kurkhonda and Mundouttee will constitute one Tuhseeldaree and one Thannah. The Tuhseeldaree and Thannah should be at Samplah, and a strong post at Kurkhonda. The expense of building a new Tuhseeldaree and Thannah at Samplah will be sanctioned.”

Note on the Istumrar of the Munduls of Kurnaul in the District of Paneeput.—The sub-settlement of the villages comprising the istumrar of Kurnaul was made by Mr. C. Gubbins for five years. The settlement so far failed that considerable balances accrued on many of the villages. The Biswadars allege as the cause of a balance, deficiency of assets; the Munduls allege embezzlement of profits. The truth of one or other of these positions should be determined judicially. It is just possible that the Munduls have allowed the balances to accumulate, in order to crush the Biswadars and extinguish their rights. If the Munduls agree to suspend or remit any portion of their rights, a formal deed of renunciation must be drawn up on stamped paper and executed before witnesses. It is not necessary to enter upon the family disputes of the Munduls. It is very desirable that they should be terminated if

possible. If not, the men must be left to fight out their own battles and ruin themselves.

Kunkur and Khoora for Ganges Canal.—Kunkur found on any estate belongs to the proprietor of that estate. Every proprietor has a right to quarry the kunkur himself, and to use or sell it. He has also a right to prevent others, except under certain circumstances, from quarrying the kunkur without his consent. In the same way khoora is private property, belonging to the person in whose yard it is found, or to the community in whose village it is collected. Both kunkur and khoora may be obtained on the ordinary principles of supply and demand by fair competition in the market.*

Preparation of District Maps—The map should generally be on the scale of two miles to an inch, and where the Mouzahs are very large, on the scale of four miles to the inch. The map should be first put together to show only village boundaries, sites of villages, and rivers. It should then be sent to the Executive Officer of Roads and from him to the Executive Officer of Canals, for the insertion of Roads, Cauas and Rajbhuas. It should then be sent to the Collector, for the boundaries of Purgunnahs, Tuhseeldarces and Thannahs and lastly coloured and indexed by the compiler. The map when thus completed should be sent by the compiler to the Secretary to Government, North-West Provinces, who will take measures for its being lithographed. There is a further minute, dated the 14th April, 1852, "on the arrangement of the interior Divisions of Districts and the preparation of District Maps shewing village boundaries."

Revision of Settlement in Bijnore.—The letter on this subject, written in 1853, is addressed to the Sudder Board of Revenue and in any curtailed form would be useless.

Map of the Environs of Delhi.—The memorandum is upon Lieutenant Burgess's Map of the Environs of Delhi. The space, south of Delhi, is divided into three great basins, one drains into the Nujjufgurh Jheel, another comprises the country south of the Kootub and drains through the Badshahpoor Nullah into the Nujjufgurh Jheel, while the third drains into the Jumna by a nameless nullah, running under Humatoon Shah's tomb. It was attempted in the map to shew the limits of these basins by means of blue lines, these lines should be erased. The northern part of the district is incorrectly drawn in the map. The errors should be corrected.

Road from Dehra to the Plains—The idea which regulates the project is to take up the water-shed line of the Doab and to connect it with the water-shed of

the Dhoon. To carry out this idea some such course as the following may be found best:—"Determine accurately the water-shed of the Doab and of the Dhoon, where the Sewaliks leave the plains. Then find the points where these water-sheds strike the water-shed of the Sewaliks. On these four points raise conspicuous land-marks, and fix their positions on the map. Then minutely examine each of the three intervening sections, so as to determine and map the true water-shed, and then find how by cuttings, or tunnelling, or bridges, the chief difficulties on each section may be avoided or overcome."

Salaries of Uncovenanted Officers in the Canal Department.—

1st September, 1852.

Mr. Thomason increased the allowances of certain uncovenanted servants without reference to the Court of Directors. The Court of Directors required an explanation of the grounds on which this augmentation of allowances was adopted, without previous reference to themselves. The Lieutenant Governor states, that he was not aware that the salaries of uncovenanted officers could not be increased without a reference to the Court of Directors, but at the same time details the grounds on which he hopes that their sanction will not be withheld in the cases in question. "Those who have had to carry on large public works in a country like this, are well aware of the great difficulty of obtaining suitable agency. Military men are required for other branches of the public service, or are called away by the exigencies of war. Uncovenanted servants of sufficient qualifications are difficult to obtain, and are liable to be tempted away by superior advantages offered to them, on other public or private undertakings. All are subject to be removed by death or by sickness, to which the best and most active men are in the greatest degree exposed."

In such a case the only resource is, to throw increased labour on those who remain. "It is contrary to the experience of all human nature to suppose, that such additional labour and responsibility will be cheerfully incurred without extra remuneration. When every effort is used to extract the greatest possible amount of labour from a very limited number of agents, some discretion must be admitted in apportioning the remuneration of those agents. If the fair reward is denied to the persons entrusted with the disbursements, the character of the work performed must suffer in quality, or in quantity, or in economy of execution, and each of these entails a heavy loss upon those at whose cost the operations are carried on."

*Erection of a Suraokees' Temple in Allahabad.—*Certain Hindoo residents of the town of Allahabad petitioned against the erection of a new Mandur in a
May, 1852.

certain locality. In disputes of this kind the natural right is on the side of the party wishing to erect the place of worship on his own ground. On the other hand he should not so dispose of his property as unjustly and unnecessarily to infringe on the comfort, or offend the prejudices of others. There is no question of the intolerant feelings of the Hindoos towards Suraogees. The Hindoos would never willingly suffer the public exercise of the religion of their rivals. Mundurs may always be erected where numerous Suraogees reside, and the Hindoos, if they so please, may desert that quarter of the town.

Cultivation of Poppy in the North-West Provinces.—"As 8th October, 1852. regards these provinces it may be generally said, that the Opium Department has its agents in the Divisions of Benares and Allahabad, and not in the Divisions of Agra, Rohilkund Meerut and Delhi. In these last four mentioned Divisions, therefore, the cultivation of the Poppy is most strictly and entirely prohibited; whilst it is grown in abundance all round in Oude, in the Hills, in the Sikh Territory, in Rajpootanah, Bhurtpoor, and Gwalior. The reason and object of this prohibition is not apparent."

The Akbarce Revenue from opium is raised in the following manner:—"The collectors procure from the agent at Benares, a certain quantity of opium such as they calculate will suffice for the consumption of their districts. This is furnished at the cost price, either 5 Rupees or Rupees 5-8 per seer. The opium so furnished to them is taken by the opium farmer of the district at double the cost price, and he also pays a certain sum, larger or smaller, per dcm, for the privilege of selling opium by retail. In theory he only sells the opium which he receives from the Government; but in practice he becomes the licensed dealer in smuggled opium; the quantity of the Government article which he sells, being only sufficient to keep up decent appearances."

Now the government opium, which in the districts is sold at double the cost price, would realize a much larger amount in the Calcutta market. For example:—From 1815 to 1850 the Benares opium agent forwarded to the Collectors in the North-West Provinces Mds. 1450-19-2½, which realised Rs. 2,96,047-18. In Calcutta the same quantity would have fetched Rs. 8,37,729-12-7. This entailed during five years a loss of Rs. 1,83,205 on government or an average annual loss of Rs. 36,641. The cultivation of the poppy and the trade in opium should be legalised in the districts where it is not produced by Government, and the Collectors should issue licences for the sale of opium in the same way as of any other intoxicating drug.

Right of Pre-emption.—The Collector cannot enforce the right of pre-emption, neither should the sale of an estate be held by the Collector as sufficient warrant for a mutation of names in his Register. The completion of the sale is sufficient to transfer, from the seller to the purchaser, the claim, but not the possession. In virtue of the sale the purchaser may sue for possession of which he is forcibly or wrongfully deprived. The Register is simply a faithful record of persons actually in possession.

Tuccavee Balances.—A paper on this subject has already been summarised. The former memorandum was on the Tuccavee Balances in Rohileund, the present memorandum is on the like accounts in Bundelcund. They should be adjusted as speedily as possible, and no claim that has been outstanding for more than three years and has not been made the subject of special report within that period should be enforced, without a special reference to the Board of Revenue.

Course of Railway through the North-West Provinces.—The country from Allahabad to Delhi presents no engineering difficulty. The surface is level, free from liability to inundation, and intersected by no great rivers which there will be any difficulty in crossing, for even the Jumna can be bridged at no great expense. In the Doab, the present commercial marts on the Ganges are Cawnpore and Furruckabad, whilst on the Jumna they are Calpee, Agra, Muttra and Delhi. The Jumna route will therefore pay best. From Allahabad to Delhi are two lines worthy of consideration, one, the old Mogul line along the Jumna, crossing that River at Agra, and then proceeding up the right bank to Delhi; the other, that of the Grand Trunk Road, continuing along the Ganges to Cawnpore, and then gradually crossing the Doab till it reaches the bank of the Jumna immediately opposite Delhi. Mr. Thomason thinks the former line would give easy access to Rajpootana, Central India and Bombay, whilst the latter route would open up Rohileund and the upper Doab.

Debt Due by Marwar.—Mr. Thomason sees no advantage in leaving the question regarding the debt due to the British Government from Marwar on account of its Mairwara villages any longer open. The demand upon the Jodhpore state of Rs. 15,000 per annum, as a contribution to the Mairwara Battalion after 1841, should be renounced. The Jodhpore state has agreed to pay the balance due at the close of 1841; and to allow us to keep the villages so long as we see fit to manage them, on condition of our paying over to the Darbar the collections, after deducting the costs of manage-

ment, which may be taken at a fixed sum of Rs. 2,000 per annum. The balance due from Jodhpore at the close of 1840-41 was Rs. 1,28,826-14-4½. In 1850-51, there was however a balance due to Jodhpore from these villages of Rs. 65,384-0-8½. Statements shewing the disbursements, gross revenue, and net revenue from 1846 to 1851, of Ajmere Mairwara are appended.

Remissions in Thakoordwara, Zillah Moradabad.—Remissions of Revenue for the years 1851-52, 1852-53 in Purgunnahs Thakoordwara and Kasheepoor were recommended on the plea of an alleged deficiency of rain. And yet the register of rain shews a fall in one purgunnah of 25.35 inches and in the other of 36.37 inches during the year. Still the Commissioner asserts that there is no doubt of the absolute necessity of remission. The assurance to this effect of both the Collector and the Commissioner must be accepted, and the balances be remitted from those from whom it cannot be realized. The state of these purgunnahs is far from what it ought to be, and it is an evil precedent when idle inactivity and factious recusancy are allowed, as here, to triumph. The soil is fertile, water is near the surface, the means of artificial irrigation abundant, and the assessment light, but the peasantry are neither thriving nor industrious.

Proposal for a New Revenue Year.—"Experience has shown that the sol-lunar Fussyly year was very inconvenient for Revenue purposes, and practically that inconvenience had been in some degree remedied by arbitrarily assuming that the Fussyly year commenced on October 1st."

The inconvenience might be entirely removed by determining that whilst the Fussyly year was retained as the Revenue year, the instalment should proceed according to the Roman calendar. But nature fixes the time for the commencement of the agricultural year. After the Rubbee crops have been cut there is a pause in almost all agricultural operations till the first fall of rain. If then the agricultural year were made to commence either at the beginning of June or July, the year would represent a period within which the ordinary agricultural operations of a village community could be commenced or terminated.

"It may therefore be found advantageous to establish, as the agricultural and Revenue year in these provinces, one which shall commence in June, be divided according to the Roman calendar, and bear the number of the Fussyly year, which would commence on the 1st of Assun following."

Powers of Jageerdars in Jaloun.—"The persons to whom your letter refers are five in number. In Jaloun there are the Rajah of Juggumpunpore, the Rao of Goorserai, and the Gurreebund Takoer of Serawan

1st July, 1853

In Kuchwahagurh there are the Rajah of Rampoor, and Rao of Gopalpoora.

It is difficult to maintain good Government without trenching on the privileges of the chieftains and it is at the same time impossible to witness tyranny and oppression, without renouncing the obligations resting on the ruling power. The means to be employed for inducing the chiefs rightly to administer the country must be influence and advice. We are under no obligation to maintain their apparent independence. The arrangement is one of favour not right. It should so be stated to them; and the knowledge that such is the case, will be one of the best securities for their future good conduct. No sunnud should on any account be given, for pledges of all kinds will but weaken our power of control.

The second volume closes with an unfinished draft of a Revenue Code, which Mr. Thomas on for several years prior to his death had under preparation and at one time intended to lay before the Legislative Council, for the purpose of consolidating in one act the Law for the Administration of the Revenue.

THE AGRICULTURAL EXHIBITIONS OF THE MADRAS PROVINCES.

Madras Records, No. XLV.

THE record contains reports from the Collectors of Masulipatam, Chingleput, Bellary, Tinnevely, Salem, South Canara, Coimbatore and Cuddapah on the exhibitions held during 1856, in their respective districts. These reports were submitted by the Board of Revenue to the Government in 1857. Subsequently the Board of Revenue submitted reports on South Arcot, Ganjam, Malabar and South Canara Exhibitions held at the close of 1856 and in 1857. The record also contains a circular memorandum of the Board of Revenue regarding the cultivation and manufacture of indigo as carried on in the Benares Province by Mr. Claud Hamilton Brown of Mirzapore.

The exhibition in the Masulipatam division was held on the 11th and 12th of March, 1856, at Bezoarah. For the adjudication of prizes there were four committees according to the nature of the things submitted. The committees were respectively for Live Stock and Horses; for Fibres and Grains; for Drugs, Oils, Dyes, and Minerals; and for Miscellaneous Articles. The number of lots registered at the exhibition was about six hundred, and others

were brought too late for registry. The whole expense of the exhibition amounted to Rs. 1,784-9-3. Of this sum Rs. 1,485 were distributed as prizes, and the remainder was expended on certain incidental expenses connected with the exhibition. The Live Stock Committee thought the show of animals on the whole creditable. No cows however appeared, the ryots thinking travelling injurious to their animals, and liable to prevent a sufficient yield of milk. The show of grains and fibres was particularly good. Of Paddy eighteen or nineteen varieties were exhibited and of Jonna four or five. The best wheat exhibited came from Chullapally. Gogoo and Sunn fibres were exhibited in considerable quantities, some of the latter fibre was very badly cleaned and dressed. The Saganara, or bow-string hemp from Ellore was well prepared, and was the best specimen of fibre shown. The Bandanara or fibre from the Bendekaya plant was also good, the plantain fibre exhibited was very inferior. Only one species of fibre of those exhibited was new to the committee. It is known by the three names of "Medabalemenara, or Parasonara, or Moottum Moolka Nara," and is understood to be the produce of a plant growing wild in the jungle. The fibre was soft and silky and made good ropes. A rope having a diameter of three-eighths of an inch broke under a strain of 198 lbs. its diameter being reduced one-third. "The prize specimen of country cotton was very good and well cleaned; cotton, said to have been grown from the American seed distributed by Government, was shown, but uncleaned, and therefore an essential condition not having been complied with, no prize was awarded. The cotton itself, when plucked from the seed, was nothing remarkable, nor was it longer in the staple than the country. A specimen of cotton rope, made, not from the raw fibre, but from cotton thread, was exhibited by Lieutenant Farewell; and being very superior to that usually manufactured by native rope-makers, was considered worthy of a prize of 10 Rupees." The oil, drug, and skin committee awarded twenty prizes of the aggregate value of 485 rupees, very few articles were exhibited, and these not of any superior quality. The committee for miscellaneous goods awarded prizes to the amount of 246 rupees. The highest prizes were given for the best samples of tobacco and saltpetre, and for models of agricultural implements. A prize of 10 rupees was awarded for a model steam engine, and twenty rupees for a model bungalow.

At Chingleput the exhibition was held on the 21st April, 1856, prizes were awarded to the extent of Rupees 975, and the incidental expenses amounted to Rs. 459-6-4. The exhibition was not a very good one, only five hundred and eighty-two lots being exhibited. The committee account for this by the un-

seasonable time of the year, the period fixed for the exhibition being too long after the principal harvest time, and by a report spread abroad that the object of the Government in proposing the exhibition was to ascertain the wealth of the inhabitants and the resources of the district, for the purpose of adding to the taxation. The paddy exhibited was good and so was the jack fruit. Mr. Fitzgerald who holds a farm under Government in the Sydapet Talook exhibited a "triple coulter plough" which the Committee thought worthy of notice. The plough requires two pairs of bullocks to draw it, and does the work of eight ordinary native ploughs drawn by only one pair of bullocks. Drummer William Haydon who holds some lands in Conjeevaram exhibited a fair specimen of cotton raised from American seed.

The success of the Bellary exhibition held from the 10th to the 21st June, inclusive, exceeded the most sanguine expectations of the committee. The Tehsildars of the neighbouring talooks and thousands of natives attended the exhibition, the cost of which amounted to Rs. 2,451.10-3. Of this sum Rs. 2,203 was distributed in prizes. The Government allowed 3,000 rupees, and the balance was returned to the Collector. The shew of wheat, fibres, wool, hides, native fruit and cumblics was particularly good. The other articles exhibited call for no remark. Though the district abounds in iron-stone little or no iron was shewn. Amongst the miscellaneous articles exhibited was an exceedingly handsome gold-worked cloth valued at 2,000 rupees, a large quantity of native armoury of Persian manufacture, an English pattern turning lathe made by a native of Bellary and some shawls, tape, and sarsaparilla. The cotton exhibited was only indigenous.

In Tinnevely there were two hundred and sixty-five Exhibitors and prizes distributed to the extent of Rs. 1,508. The greatest failure was in the exhibition of cattle, sheep, poultry, sugar and sugar-candy. The specimens of cotton, fibres, coffee, senna, spices, tobacco and saltpetre were very good. The report contains an account of the method pursued in the cultivation of four different kinds of cotton, senna and nutmegs. The cultivation of American cotton is very limited, of senna about 50 bales, each weighing 250 lbs., are procurable every year. The nutmegs and cloves exhibited were the produce of the late Government spice-gardens sold to Mr. Cocq. The annual produce of those gardens is about 650 lbs. of nutmeg and 150 lbs. of cloves. The gardens are also planted with coffee and other trees.

The Salem exhibition opened on the 2nd July, 1856 "by far the larger number of exhibitors belonged to the town or the Talook of Salem, and the Shevaroy Hills, Settlers on the Hills

Europeans, Moottadars, and natives of other grades, were among the exhibitors and most of the Tehsildars exhibited, but none of the ryots residing in the distant parts of the district."

The amount distributed in prizes was Rs. 1913. There were other expenses connected with the exhibition, the heaviest of which was Rs. 590, for the building in which the shew took place. Altogether the sum expended amounted to Rs. 2,503-8-9. In this district also, it was supposed that the exhibition was only preparatory to an increase of the assessment.

The North Canara exhibition was held at Sircy on the 26th February, 1856. The number present at the exhibition at any one time during the five days it lasted was about 3000, it is computed that 5,000 strangers attended. The total number of exhibitors was 677; and 2,701 articles, varieties of 209 different products, were exhibited. The whole cost of the exhibition was Rs. 1,147-4-2. Of staple products the articles which engaged most attention were betel-nut, country cane sugars, jaggery, cardamoms and rice. Of betel-nut there were no less than two hundred and fifty exhibitors, whilst of rice there were only twenty. One hundred and ninety-three persons exhibited specimens of pepper, fifty-three persons sugar, one hundred and twenty-two jaggery, one hundred and ninety-one cardamoms, thirty-one coffee and twelve ginger. Specimens of bee's wax, gamboge, cassia ligna, cassia fistula, terra japonica, and coir were shewn. The exhibition of oils was highly satisfactory, and the specimens exhibited comprised cocoanut oil, fish oil, gingely oil, mugira-seed oil, cassia oil, sandal-wood oil and castor oil. The trade of the district in sandal-wood oil is very considerable. The following table exhibits the amount of oil and tallow exported in the year 1854-55 from all Canara:—

	Quantity.		Value.		
	Cds.	Mds.	Rs.	A.	P.
Fish Oil,	75	...	1,988	...	...
Sandal-wood Oil,	28	...	81,495	...	...
Cassia Oil,	5	...	1,590	...	...
Cocoanut Oil,	103	...	5,932	...	...
Lamp Oil,	6	...	356	...	...
Gingely Oil,	48	...	2,671	...	...
Honny Oil (Calophylun Trophyl- lum),	3	...	112	...	...
Piney Tallow (Vateria Indica,) 71	...	...	4,350	..	...
Total,	339	...	98,494	...	...

There was a highly creditable exhibition of fibres. The different sorts shown, were Coir, Cowlee, Byney, Plantain, Bendy, Kodekeny, Pineapple, Cowrie, Poondy, Aloe and Indian Hemp.

The Cowrie fibre is a new article of commerce and it was exhibited by twenty persons. It makes excellent paper and twine. No cotton was exhibited neither was there any tobacco. The live stock was as usual poor and very few prizes were given to exhibitors in this department. One of the most interesting of the raw products exhibited was a sample of the leaves of the Hulli Murra. This tree is supposed to be identical with that producing Gutta percha.

At Cuddapah the exhibition was found a failure, owing to the circulation of the most absurd reports. On the day, 26th May, 1856, advertised for the opening of the exhibition only a few cattle made their appearance. There was very little competition, but to encourage future exhibitors Rs 928 was distributed in prizes.

The Agricultural exhibition for 1857, of South Arcot, was held at Cuddalore on the 10th February. The number of visitors amounted on the first day to 11,000 and on the second to seven thousand. The sum expended in prizes amounted to Rs. 2,128, the whole expenditure was Rs. 2,328-15-5. There were two varieties of Cotton exhibited, the American and the Native. Of the former, one batch was in seed, and two had been cleaned, the latter had been injured in the fibre whilst undergoing the process of separation. The live stock of the province was badly represented, but Mr. McDonell exhibited forty half bred Merino sheep. The show of implements was bad, but machinery was better represented. A double-acted pair of bellows made by a boy in the Porto Novo Iron works, during his own leisure, was considered deserving of a prize. The bellows were portable and produced a continuous blast. The quality of the indigo exhibited was much superior to that of the former year, and its cultivation is greatly extending.

The first Ganjam district exhibition was held on the 3rd and 4th of December, 1856. It is proposed that in future the exhibition should be held in February, which will give the ryots time to house their crops. At first it was supposed that the exhibition would prove a failure. The inhabitants of the district, "one and all appeared incapable of comprehending that Government could have no sinister and ulterior object in view, and they therefore brought themselves to look upon the rewards offered by Government in the light of a sort of temporary advance, to be recovered with interest at some future period, and their ready ingenuity pointed to an increased assessment on the producers of the best grains, a tax on glutinous jungle trees, to commence probably with the prize man for resins and gums, and an increased *maturpha*. Superstition also lent its aid to fill the cup to the brim, and the most wild and laughably fanciful no-

tions were, in some instances, I am inclined to think, designedly spread and eagerly seized by the people, one of which was so original that it deserves mention, *viz.*, that one of the great ends of the Exhibition was to convert the heathen to Christianity, that for this reason prizes were offered by Government for the best paddy, that the *whole* in the district might be bought up and the natives compelled to eat boiled rice and become Christians, and that to celebrate the event, prizes were offered by Government for the best beef in the shape of cattle of all sorts, on which the Europeans were to regale at Christmas in token of thanksgiving."

But by a little judicious management, the competition for many of the prizes became very brisk, and when the rupees began to circulate "many were not a little mortified at seeing their next door neighbours rewarded with good round sums of money for exhibiting articles inferior to what they had in their own possession *at home*, and left freely expressing their intention to recover their lost laurels *next year*."

"Mr. Davidson's report on the exhibition unfortunately affords no information as to the quantity of the articles exhibited. In a subsequent communication he gives the number of competitors and mentions in favorable terms a sample of Arrowroot exhibited by Captain Johnstone of the 26th Regiment N. I. and adjudged worthy of the first prize offered for this article. Captain Johnstone imported the roots from Burmah, and samples of his produce, sent to England last year, were considered equal to the Bermuda Arrowroot, except in color, which has improved in the manufacture of this year. The Khonds who now cultivate an inferior description have been induced to take some of the roots for trial.

"Mr. Davidson also mentions the show of native sugar as being of superior quality."

The Acting Collector expresses in a subsequent report that he is "in great hopes that with a little encouragement the manufacture of Cumblies and Gunny bags, two essentials in this district, may be introduced, and would suggest the desirability of Government securing the services of a few men from Cuttack and Guntoor or Bellary, on a monthly salary, to instruct the weavers in manufacturing cumblies."

The South Canara exhibition held at Mangalore did not meet with the same success as that held at Sirce. The large landholders evinced very little interest in the scheme and few of the native Merchants of Mangalore even visited the exhibition. The whole sum expended on the exhibition was Rs. 1,119-11-8.

The first exhibition in the Malabar district was held in February, 1857. The principle products exhibited were coffee, ginger,

spices, arrowroot, drugs, iron, textile fabrics and salt. "Some very handsome Shawls, Brocades, &c., from Bengal and Surat, were exhibited by His Highness the Zamorin of Calicut, Awoker M. Koonjee, Mamoo Koyah Aroola Coyah, Merchants, Calicut, and by Manjoo Camathy, Head Moonshee of the Collector's Office. Some very promising Cotton Canvas woven at Calicut, was exhibited by Messrs. Andrews and Co, and by P. Mamaly Adjee. Narrow Hemp Canvas of good quality was exhibited from Temelpoorom by N. Manjumenon. The samples of crotchet work from the Girl's School of the Basle Mission at Calicut were very abundant and elaborate, and other Ladies of the East Indian Society at Calicut exhibited Carpet work, Embroidery, and Crotchet work of effective devices.

"The show of native jewels was on the whole rich and interesting, especially as exhibiting the style of ornament in use among the various castes of the district, but it was not distinguished by any specimen of *recherché* and peculiar workmanship of the coast.

"Good specimens of lithography and book-binding were furnished from the Mission Press at Tellicherry. From Travancore were sent specimens of Foolscap and Cartridge Papers of fair quality."

The aggregate Expenditure on the exhibition was Rs. 2,706-4 4 of which Rs. 2,157-3-7 were distributed in prizes.

The remarks of the Madras Government on these reports are not important enough to be here summarised, it is recommended that "every effort should be made in continuation of the attempts described regarding the more general use of saw-gins in the Bellary and Tinnevelly districts"

The memorandum on the cultivation and manufacture of indigo is as follows :—

"*Soil*.—The richest loam is supposed to give the best produce, though lighter soils frequently give finer looking *plants*. Moist low soils are not suitable, but a great deal depends upon the sub-soil, as the root grows vertically and to a great depth. High, stony lands are to be avoided, excepting the sites of old villages, where from the presence of lime and animal or vegetable matter, very fine crops are frequently produced, particularly in a season when the rains are heavy.

"Fields that have recently had heavy crops (Maize, Indian Corn, ~~Peas~~, &c.) taken off them should be avoided.

"*Cultivation*—Immediately on the setting in of the periodical rains say 15th to 30th June, (in these parts,) the lands should be well and carefully ploughed (3 ploughings,) the seed thrown broad cast, at the rate of 4 seers (8 lbs.) per beegah, and the land smoothened over with a Henga (rudimentary harrow.)

"The plant generally shews itself in 3 or 4 days; as soon as it has got 2 or 3 inches high, 6 or 8 leaves, all weeds must be carefully removed, and a second weeding is again requisite by the time the plant is 6 or 7 inches high.

"While weeding, any places where the seed may have failed to germinate can be re-sown by sprinkling the seed on the surface, and dibbling it in where required.

"In about 90 days the plant begins to flower, and is then ready for cutting.

"*Manufacture.*—The plant is cut at about 6 inches from the ground, and carried to the steeping vats with as little delay as possible, strewn horizontally in the vats, and pressed down by means of beams fixed into side posts, under the beams bamboos being placed. Water must be immediately run in, sufficient just to cover the plant. If water is not at once let in, the plant will heat and become spoilt.

"*Steeping.*—The time for steeping depends much upon the temperature of the atmosphere, and can only be learnt by experience and careful watching of the vats; but it may be mentioned, that in close sultry weather, east wind, thermometer 96° in the shade, 11 or 12 hours are sufficient. In dry cool weather, west wind, 15 or 16 are sometimes requisite. If the plant is very ripe, the vat will be ready sooner than if the plant was young and unripe.

"It is most important to steep exactly the proper time, the quality and quantity of produce being dependent on this being done; as a guide the following signs may be mentioned, as shewing that the vat is ready to be let off:—

"1st. As soon as the water begins to fall in the vat. 2nd, when the bubbles that rise to the surface burst *at once*. 3rd, on splashing up the surface water, it has an orange tinge mingling with green. 4th, the smell of the water is also a great guide; when ripe it should have a sweetish pungent odour, quite different from the raw smell of the unripe green-coloured water. The first of the water when let off into the beating vat has a rich orange colour, and from the depth of this you can judge whether the vat has been a proper time steeping.

"*Beating.*—This is performed by men who enter the water (about 7 to each vat) and agitate it either by the hands, or by a wooden paddle, at first gently, but gradually increasing as the *secula* begin to separate, which is known by the subsidence of the froth, and the change of the colour of the water from green to dark blue. The time usually necessary for beating is from 1½ to 3 hours, but no positive rule can be given for this. The following are common modes for testing the state of the vat:—

"1st. Take a little of the water in a white plate or saucer,

and let it stand. If the *fecula* subside readily, and the water remains of a *Madeira* colour, the beating may be stopped.

"2nd. Dip a coarse cloth in the vat and wring out the water, observing its colour. If green, the beating must be continued, but if *Madeira* or brownish colour, it is ready.

"3rd. When sufficiently beaten, the surface of the water will, as soon as the beating is suspended, become of a peculiar glassy appearance, and the froth subside with a sparkle and fizz-like champagne.

"Three or four chatties of cold water, or weak lime water, are then sprinkled over the surface to hasten the precipitation of the *fecula*, which does not completely take place in less than 3 or 4 hours. The water must then be drawn off from the surface through plug holes made for the purpose in a stone slab inserted in the wall of the vat. The *fecula* which remain at the bottom are removed to the boiler.

"*Boiling*.—Bring it to the boiling as quickly as possible, and keep it there for 5 or 6 hours. While boiling it must be stirred to prevent the Indigo burning and skimmed with a perforated ladle. Its being sufficiently boiled is known by its assuming a glassy appearance.

"When sufficiently boiled it is run off to the straining table, where it remains 12 or 15 hours draining, it is then taken to the presses and gradually pressed; this takes 12 hours. It is then ready to be taken out, cut, stamped, and laid in the drying house to dry.

"A good size of vat is 16 feet by 14 feet by 4½ feet for the steeping vat; the beating vat to be somewhat smaller and shallower.

"A beegah contains 27,224 feet; 200 mds. of plant do very well if they yield one munn (82 lbs.) of any Indigo; a vat of the above size holds about 100 mds. of plants.

"The plants sown say in June, July, are cut 3 months afterwards, 'Nowdah,' and manufactured; and a second crop will be taken from it the following August, 'Khoontee.' The second cutting gives the largest produce and best quality, the third 'Tursalee,' but is seldom allowed to grow 3 years."

The foregoing memorandum was circulated by the Board of Revenue in all the indigo districts of the Madras Presidency.

THE EFFECTS OF THE GODAVERY, KRISHNA AND COLEROON ANNICUTS.

On the 29th May, 1852, the Revenue Board called upon the Collector of Rajahmundry for a report on the effects of the Go-

lavery irrigation works. In obedience to this order Mr. Taylor, the Sub-Collector in charge submitted a short report on the 29th July, 1854. The annicut was commenced in Fusly, 1257 (1847-48) and in Fusly, 1263 the extent and shist of the land irrigated was double the extent of the whole land previously cultivated. The net increase of revenue in the whole period of 12 years was Rs. 70,000, which at the rate of 5 per cent. per annum is equivalent to the interest on Rs. 1,75,000 for 8 years. The works had then cost Rs. 2,03,590.

The Board of Revenue did not consider Mr. Taylor's account sufficiently explicit and called for a more detailed report. Accordingly on the 23rd September, 1854, Mr. Taylor submitted to the Board a report he had addressed in May, 1853 to Colonel Cotton, the Chief Engineer of the Madras Presidency. The direct benefit accruing to the Rajahmundry district from the works on the Godavery are three-fold :—

“ 1st. The preservation of lands from floods by the new system of embankments; 2nd. Their relief by the cutting of drainage Channels; 3rd. The supply of the lands with water throughout the year.”

Nor is this all, the annicut has produced a very material effect upon the revenue derived from the sales of salt. The value of spontaneous salt formerly removed clandestinely was very considerable. But since March, 1852, the flow of fresh water has nearly stopped the production of such salt and it was thought that the salt sales at the Mogultoor depot for Fusly, 1262 would exceed those of the previous Fusly by Rs. 20,000. In spite of the increased revenue derived from the villages immediately benefited by the Godavery works, and consequent increase of assessment, the condition of the cultivators has greatly improved. The ryots are deeply interested in the progress of the works and every village desires its own water course. “ It is no longer necessary to compel them to the adoption of measures for their own benefit—for they are not slow to recognise a personal advantage when it costs them nothing, and hence it may be confidently argued, that there will be an extensive use of these irrigation channels when once they are completed.”

The assessment in some parts of the division is somewhat too high. Thus in the Mogultoor, Woondy and Tankoo Talooks the average assessment is Rs. 3-9-5 per acre, whereas in the North-West Provinces it is only Re. 1-12 per acre on the acres actually cultivated. The assessment will be more heavily felt as the price of agricultural produce falls, which unless counteracting causes are brought into play, it will do, on account of the stimulus given to increased production. Mr. Taylor looks for this counteracting cause in the facilities to communication which the irrigat-

ing channels will afford. Already considerable traffic has sprung up even on the uncompleted canals, and the people are prepared to take advantage of these improvements. They ask nothing better than that means be afforded them of making their own terms with the purchasers of their produce, and many will build their own boats as soon as they know that the navigation is certain.

The following tabular statements exhibit the revenue derived from the Delta Talooks and the Talooks above the annicut for six years prior to and succeeding the commencement of the irrigation works in Rajahmundry ;—

Fuslies.	Delta Talooks.			Talooks above the Annicut.		
	Collection.	Increase.	Decrease.	Collection.	Increase.	Decrease.
1251,	5,27,778	Comparison	with Fusly,	1251.		
1252,	5,25,041	.....	.....	1,80,532	.....	.....
1253,	5,02,035	.....	2,737	1,75,728	.....	4,804
1254,	5,39,578	.....	25,743	1,80,316	.....	216
1255,	5,48,559	11,800	.....	1,77,348	.....	3,184
1256,	5,86,317	20,781	.....	1,76,228	.....	4,304
		58,539	.....	1,97,757	17,225	.....
		91,220	28,480		17,225	12,508
1257,	6,15,138	Comparison	with Fusly,	1256.		
1258,	6,44,377	28,821	.....	2,09,582	11,825	.....
1259,	6,16,282	58,060	.....	2,18,846	21,089	.....
1260,	6,67,557	29,965	.....	2,18,888	21,131	.....
1261,	6,89,033	81,240	.....	2,34,720	36,963	.....
1262,	6,80,582	1,02,716	.....	2,42,669	44,912	.....
		94,265	.....	2,40,664	42,907	.....
		3,95,067	.....		1,78,827	.....

"It is seen therefore that the average collections from the talooks composing the tract beyond the reach of the Annicut, which during the first period comprised in these statements amounted to 1,83,098, had increased during the second period to 2,35,000. It is admitted that this gradually progressive increase, though no doubt assisted by the life and energy infused into the people by public expenditure, and by the circulation of money produced by the large sugar works at Rajahmundry, is mainly and justly due to improved management, and better protection to life and property. It will be observed, that, as each estate or talook lapsed to Government, the revenue recovered itself after the first year, and except in the case of Rajahmundry, progressively rose to the last year of the series, without break or check of any kind; until in almost every instance, it far exceeds the permanent peishcush. This ought to be the natural result of an improved system of management in any portion of a province, favored as this has been, with a succession of propitious seasons, and exposed to no calamitous visitations, impossible to control; or, to the miseries of drought and famine."

If we have regard to the statement of the collection in the Delta districts, it seems that without the relief and assistance afforded by the Godavery works "in the way of circulation of money, protection from floods, and improved irrigation, we should have been utterly unable to realise the enhanced demand of the last six years in the lower talooks of the district, and to show an aggregate surplus of nearly 4 lacs of rupees within that period; to compare with Rs. 62,000, the increase of the 6 years preceding the commencement of the Annicut, and most of which is due to the last year of the series, Fusly, 1256, in which the Annicut was commenced."

The report concludes with various tables shewing the statistical position of the province of Rajahmundry, and remarks thereon which it is not necessary here to summarise, sketch maps of the Rajahmundry district and its talooks are appended.

On the 23rd October, 1854, the Government of Madras forwarded to the Board of Revenue a memorandum from Mr. Stokes, Collector of Guntoor, on the Krishna water works.

The objections raised to the Krishna works may be thus stated:—"That the project was hastily adopted, that the over-sanguine recommendations of the Engineers, especially Colonel Cotton, were too implicitly accepted—that the calculations by which it was supported, were loose and fallacious, the preliminary inquiries not having been duly substantiated on the spot by Revenue Officers of local experience, that the Delta consists of black soil unsuited to irrigation, to which the people are consequently believed to be indifferent; and that the proved failure of

certain such works in that locality, forbids the anticipation of more favorable results from these costlier schemes: while another line of argument proceeds upon the position, that without these works, the rental of the Guntoor district at no distant period, exceeded its present average by a sum at least equal to their probable net profits, and that as its depression has resulted mainly from bad management, a vigorous executive will suffice for its restoration without this vast and hazardous outlay, which under such circumstances, is a gratuitous waste of the public funds." The report proceeds to test these objections by discussing First,—the local features of the province as they influence the revenue:—Second,—the history of its more recent administration and Third,—the works themselves.

Guntoor is from its conformation, exposed both to floods and extreme drought, yet no district has been left so destitute of embankments and channels. In 1802, the district was permanently settled, being condensed into two large and three small Zemindaries. The Zemindars were not the hereditary chiefs of the country but descendants of local revenue officers under the Mahomedan Government. For nearly thirty years after the settlement, things went on smoothly. But in 1831, the elements of weakness began to appear, the largest landholders, the Vassereddy family were engrossed in endless litigation, the rental began to decline and in 1832 came the failure of rain, followed by the famine of 1833 and the fever of 1834. In two years the population numbering 2,56,000 diminished by more than one-half and the whole monetary loss was estimated at two crores and twenty-seven laks of rupees, or two and a quarter millions sterling. "After such a calamitous experience, it might have been expected that no measures within the compass of human skill and our financial capabilities would have been spared to guard against its recurrence. Yet though the value of artificial irrigation as a precaution against famine had been demonstrated forty years before, eight more passed away before attention was again directed to it.

"So great indeed was the dread of the district after the reported horrors of which it had been the scene, that whoever was sent there seems to have made it his first care to get away. From the 21st July, 1831 when Mr. Whish's management ceased, till 20th July, 1837 when Mr. Goldingham's began, the district changed hands no less than seventeen times. With such a transitory executive, any well-considered remedial measures must have been impossible.

"The only important measure of this period though conceived in a liberal and benevolent spirit, utterly failed of its object. The insolvent estates had, as a matter of course, been at-

tached and placed under the Collector's management. On his recommendation, the zemindars, with the exception of the Mal-raz Proprietrix, a widow, and the Reypilly Zemindar, a minor, were replaced in charge as managing proprietors on behalf of Government, to account professedly for all the revenues after charging their establishments and their own maintenance.

"The zemindars, however, losing sight of their reversionary interests, deemed it their policy to make the most of present opportunities. For private considerations they granted villages on favorable leases, and allowed partial and arbitrary reduction of rates. Division of the crop came to be the tenure of most of the best dry lands, as it had always been of the wet. They furnished imperfect or falsified accounts, and so greatly did they abuse their trust, that the Commissioner Mr. W. Elliot considered from information collected by him in his enquiries in 1845, that they must have misappropriated about one-third of the Revenues." Notwithstanding, however, these abuses, the district gradually improved, until from 1842 to 1844 supervened great depression in the prices of grain owing to changes in the administration. "But the year 1845-46 was marked by one of the most sudden and striking augmentations of revenue recorded in any of our provinces. The increase in the collections of land revenue alone amounted to four lacks of Rupees upon 9,67,000 Rupees, while the revenue from all sources collectively, rose from 12,82,000 to 17,83,000 or one-third more. The causes of this startling improvement are thus explained in the Settlement Report for that year.

"It will thus be seen that in the year under review, all those influences which tended to produce the depression of the revenue in the three preceding years, were simultaneously replaced by others of an exactly opposite tendency. Instead of a combination for purposes of speculation under an unprincipled and unfit Head Serishtadar, there has been an active, able and experienced servant, trained in a good school at the head of the native establishment. Instead of Ameens whose hands were tied by corruption, several very efficient servants have been obtained unconnected with the district; and while the crops were unusually good, the ryots participated in the profits of scarcity prices. The consequence has been, that the rise of the revenue was even more striking than its fall." Side by side with reforms of management the extension of public works proceeded and in 1851 the Krishna works were sanctioned. The sluices and works were not commenced till the end of 1852, and were finished by the middle of the following year. After the rains of 1853, the Krishna annicut was itself begun and the channels filled by its

means were, up to the date on which Mr. Stokes submitted his report, yielding ample profit.

The report concludes with statistical tables of the Guntoor Collectorate, illustrating its topography and annual condition, as respects population, revenue and finance for thirty years, ending 11th July, 1852.

The reports already summarised have shewn that Guntoor and Rajahmundry were favourably influenced by the Krishna and Godavery works respectively. But as Masulipatam is affected by both the Godavery and Krishna annicuts, the Board of Revenue required a report from Mr. J. Goldingham on this subject. The report was furnished on the 9th July, 1855, and embraces Rajahmundry, Guntoor and Masulipatam. The report commences by statements of the extent of culturable soil in the three districts and of the unoccupied land. It would appear that in all three districts the quantity of culturable land left unoccupied is 7,86,210 acres.

The gain to Government for seven years from the commencement of the works stands thus:—

	Rs.
"Rajahmundry,	20,23,910
Masulipatam,	6,03,484
Guntoor,	19,79,817"

"The gain in Rajahmundry and Guntoor is ascribable primarily to reforms in the administration." Mr. Goldingham in his report ceases to discuss the condition of Masulipatam and confines himself almost exclusively to remarks on Mr. Taylor's Rajahmundry report already summarised. The usual statistical tables are appended to Mr. Goldingham's report.

On the 9th July, 1855, Colonel Cotton, Commandant of Engineers, comments on Mr. Goldingham's report. He considers Mr. Goldingham's statistical returns to be incorrect, but it is needless to follow Colonel Cotton as he comments paragraph by paragraph on Mr. Goldingham's report, pointing out from time to time numerous errors and inaccuracies. In conclusion however Colonel Cotton requests the attention of Government to "the nature of the statistical returns and the remarks made upon them, which in past times have been so commonly laid before Government." He says "I look upon this paper as a lively specimen of the style of paper, which has caused such incalculable mischief. A statement is called for, it is prepared by a native subordinate in some office, perhaps a man quite incompetent, perhaps personally interested in the case. The return is put into the hands of a subordinate European officer who signs it of course, his superior does the same, it passes on through various offices, and perhaps no individual has tried it by any test whatever before it reaches

Government. I state a fact when I say that this is frequently the case. I don't know how often it has occurred to me that one minutes' examination of such a document regularly furnished to me from the proper office has shewn that it was either false or simply nonsense, proving that nobody who had signed or countersigned or forwarded it had even looked at it. Such are the returns in this paper; one gives the area of the Rajahmundry Delta 8,25,000 acres; another makes the produce of irrigated land $\frac{1}{3}$ th more than that of dry land, another makes out that the area of irrigated land was about $\frac{1}{3}$ th of what it actually was, another makes out that the increase of Revenue in the dry Talooks of Rajahmundry was much greater than in those in the Delta, conveying the impression that the irrigation had been actually injurious. In these cases it was not necessary to make investigation into the matter, but every person who had anything to do with these statements had materials in his own head to enable him to know that they were false. When to such returns taken for granted in spite of the reader's own knowledge to the contrary, are added mere suppositions, and those so strange that no name is attached to them, we have a complete specimen of a document of the past times. I do trust that this style of paper will now entirely disappear from the Records of Government. The times of make-believes and anonymous suppositions have lasted long enough. Let us now deal with realities. What possible use there can be in taking a return which we have abundance of means of knowing to be totally false, and dealing with it gravely as if we know it to be true, I cannot imagine, and I am equally at a loss to know what can be the use of supposing or allowing somebody without a name to suppose to us, when we can walk out of our tents a few hundred yards and see the case with our own eyes, or when we can send to a gentleman a few miles off, who has actually ascertained the state of the case. Why should not every officer who signs, or forwards a return be required to add something of this sort, I 'declare that I have examined this return, and I feel confident that it is substantially correct.' Or on the other hand, 'I declare that I have examined this return, and I have no reason to suppose it to be substantially false, but I have not sufficient means of satisfying myself about it.' Or 'I forward this return as it comes to me in the regular course, but I cannot, for such and such reasons, think it is substantially a true return.'

"I cannot say less than that the whole of this paper is based upon returns so false, that they represent from $\frac{1}{3}$ rd to $\frac{1}{10}$ th of the truth, and upon suppositions that are totally unfounded."

Colonel Cotton gives a corrected statement for the Rajahmundry district, which shews that since the commencement of

the Godavery works, the land revenue has increased nearly six and a half lakhs per annum and the arrears of collection have diminished from an annual average of two and one half lakhs to Rs. 30,000. The district is thus paying without the least difficulty a revenue forty per cent. greater than it did before. "Taking the total expenditure in the Rajahmundry part of the Delta at 25 lakhs, we have a return of 25 per cent. at present in Revenue, notwithstanding the neglect of the Revenue authorities. Were the whole of the watered lands assessed, the increase in old lands alone would be 18 lakhs, at a very low assessment, or 72 per cent. upon the outlay.

"Even as matters are, whether we look at the increase of Revenue, the proofs of the ease with which it is paid, the astonishing increase of internal traffic, or the increase of exports and imports, its impossible that we can be mistaken in concluding that the district has undergone a change such as no other district in India has undergone, excepting Tanjore from the same causes, and there the change was very slow compared with this. And what reason can be imagined why the state of every district in India should not be thus radically changed, if the same means were applied."

Again with regard to the traffic engendered by the increase of canals Colonel Cotton remarks that a Railway is quite unfitted for such countries as the Deltas of the Godavery and Krishna. For the Railway instead of creating traffic carries only a small portion of the old traffic whereas in the Vigeswarum Channel alone the traffic has increased about six-fold in three and a half years, and of this five-sixths has been created by the water carriage. "The Consulting Engineer urges the reduction of the charges on the Railway, and no doubt he is right in supposing that it would be politic to do it, *but the country would gain hardly anything if the whole 3,00,000 tons were transferred to the Railway, because the charge would still be only the least possible below that of the common roads.* The defect is in the apparatus, *which cannot carry cheaply.*"

In conclusion Colonel Cotton remarks :—"The whole question of these works lies in a nut-shell.

"1st. Such works can be executed at a charge of at most 6 annas per acre per annum in interest and management ;

"2nd. The increased value of produce on lands so irrigated is, on the most moderate calculation, 20 Rupees an acre, (*viz.*, 10 Rupees as dry land and 30 as wet) ;

"3rd. Therefore, if only 20 per cent. of the increase is taken as tax, the finances will be relieved to the extent of 4 Rupees per acre per annum, and the people will gain 16 Rupees ;

"4th. Besides this the people will have the whole benefit of

the water carriage, which alone would probably be fully equal to the whole water tax that they would have to pay."

On the 21st May, 1855, the Madras Board of Revenue proceeded to examine the detailed statements furnished by the Collectors of Tanjore and South Arcot relative to the effects of the Coleroon Annicuts on the revenues of these provinces. Mr. Hall, the Collector of South Arcot had stated in a report dated the 6th February, 1855, that the net gain arising from the construction of the Lower Coleroon Annicut had been, from 1836 to 1852 inclusive, Rs. 18,74,051, being an average annual profit of Rs. 85,878, or a percentage of 84½ on the original outlay.

The report of the Collector of Tanjore scrutinised by the Board of Revenue is not contained in this collection.

The subject to which the attention of the Board is directed includes some of the statements made by Colonel Cotton in his book on Public Works in India and which were contradicted by Mr. P. B. Smollett in his pamphlet entitled "Modern Hydraulic Works in Tanjore and Rajahmundry examined."

The Board considers the questions connected with the Coleroon Annicuts in the following order:—

"1st. Have these works increased the public revenue 10 lakhs per annum, raising it from 42 to 52 lakhs, according to the assertion which is made by Colonel Cotton, and which forms one of the points on which he is contradicted by Mr. Smollett.

"2nd. What is the actual addition which the Annicuts can be shown to have made to the Land Revenue?

"3rd. What has been the cost of these works and the net profit derived from them?"

With reference to the first question the Board remark:—"It is presumed that Colonel Cotton alluded to the general revenues, and not to the land revenue only, but even regarding the subject in this extended view, the Board cannot find that any such annual increase as ten lakhs has followed the construction of the Coleroon Weirs." For, the total average collections of ten years before Annicut, 1236 to 1245 inclusive, were in Tanjore Rs. 43,96,774, and the average collections of ten years after Annicut amounted to Rs. 47,06,680. Thus the increase in latter period amounted only to Rs. 3,09,906, or adding Rs. 90,000 for South Arcot, the total increase in the latter period falls somewhat short of four lakhs. Mr. Smollett did not therefore impugn Colonel Cotton's assertion of an annual addition of ten lakhs without good grounds.

With reference to the second question, the Board of Revenue are of opinion that the actual gain to Government ascribable

to the two Annicuts in Tanjore amount to Rs. 1,77,952, or adding Rs. 90,000 for South Arcot, to Rs. 2,67,952. The actual and bona fide increase of revenue from the construction of the two Annicuts having been shewn, the Board approach the third branch of the subject, viz. the cost of the two Coleroon Annicuts and the net amount of revenue they have yielded to the State. The original cost of these works was as follows :—

“ Upper Annicut,	Rs. 83,401
Lower Annicut,	99,420
South Rajah Voikal,	11,044
North Rajah Voikal,	23,524

Total, 2,17,389”

The cost of their annual repair has been per year for Tanjore Rs. 1,08,192, for South Arcot Rs. 19,598. But before the commencement of the Annicuts the average sum expended under the head of repairs on the irrigation of the lands now affected by these Annicuts was for Tanjore Rs. 1,01,327, and for South Arcot Rs. 16,044. Therefore the actual increase of expenditure in maramut establishment was for Tanjore and South Arcot, consequent on the creation of the Annicuts only Rs. 10,419. If we deduct this sum from the actual annual profit accruing to Government from the works we obtain an annual profit of Rs. 2,57,533, or in sixteen years of Rs. 41,20,528. That is a profit of 118 per cent. per annum on the cost of the works.

Having thus discussed the three separate heads of the subject the Board offer a few general observations which it is not necessary to summarise.

Colonel Cotton on the 21st May, 1855, replies to the remarks of the Board of Revenue. He defends his statement of an increase of ten lakhs and shews that the revenue of Tanjore has increased by twenty-four lakhs, or quarter million per annum. “The whole deficiency in the Indian revenue, is stated at only one million, so that four additional districts so improved, would have adjusted the finances of all India.” Colonel Cotton further says :—“How can I conclude this paper without expressing not my surprise,—for I have had too long experience of the strength of caste feelings in the revenue officers, to expect a paper from most of them which is free from conclusions arrived at manifestly under the influence of that bias, but my sorrow to see a body of faithful men, when called upon solemnly by the Government to give a judicial decision upon a vital point in the question of the management of the country, endeavouring as far as possible to shelter this most wicked attempt to deprive the country of the

works upon which not only wealth depends, but life and death. I call it most wicked, for were men of Mr. Smollett's stamp as influential as they wish, they would *succeed*, in depriving India of the only possible means of providing food in what would otherwise be times of famine. The Board know well, that had Tanjore not been irrigated in 1823 and 24, probably at least a million more of people would have perished in the South, and that had Guntoor been irrigated in 1833, it would have saved at least $\frac{1}{2}$ a million of lives in the North.

"They know well that unirrigated land paying one or two Rupees an acre, and near an inland market and a port, is unsaleable, while irrigated land cut off entirely from both by want of cheap transit, pays from 5 to 20 Rupees an acre and is highly valuable property. They know also that on a large scale, land can be provided with these things at an annual expense to Government of $\frac{1}{4}$ or $\frac{1}{2}$ Rupee. And yet they cannot stand forward conscientiously and heartily to denounce the attempts that are made to deprive the people of those benefits, and as openly support every effort that is made to urge forward these essential measures.

"It is not the writings of men like Mr. Smollett that do the mischief; he himself is too well known, as a man of strong prejudices, and his writings to all but men anxious to be misled answer themselves, but it is such papers as the one now under examination which really supports him, that are so mischievous.

"Here was an opportunity given to the Board to show that they were above all minor feelings, and when called upon, could and would give a manly, conscientious, and unmistakable verdict in a cause so vitally affecting the welfare of millions.

"There is certainly such a thing as courtesy, but a courtesy which in such critical cases says that nothing is black, nothing white, but everything a little grayish; which makes out that nothing is true, and nothing false, but every thing neither, or both, or something between the two, is not courtesy, but something else."

And again "India is like the field after an Indian battle; there is but one cry, water, water: All that is wanted is water, and this want supplied, every thing else will almost follow of course. Water for irrigation and water for transit will provide for everything else' Now either this proposition is true or it is not, Mr. Smollett's proposition, that hydraulic works are a gigantic swindle, is either true or false. Either water for irrigation and transit is the grand means of preserving life and the most effectual way of increasing the wealth of India or it is not; hydraulic works are a 'swindle' or they are not. The

Board, the body to whom is entrusted the material welfare of the Presidency, the lives of 20 millions of people, are called upon by the Government to judge in this case. They *know* the truth of the case, and they write a long report calculated as far as possible to shelter the party which holds the view they *know* to be the false one. Can we be surprised if shortly gentlemen who brought to a decisive test of this sort utterly fail, are set aside, and other agents are sought for to carry out God's purposes of mercy to India, which I for one, feel fully assured he will find agents to do, however present agency may fail. That India will be irrigated, I have no doubt, notwithstanding outward friends and open enemies."

The Board of Revenue reply to Colonel Cotton's remarks, shew several inaccuracies in his statements and believe that their report "will be considered as sufficiently testifying to Colonel Cotton's skill, and sufficiently encouraging for Government to persevere in improving the irrigation of the country."

REMOUNT HORSES FOR THE ARMY IN INDIA.

Parliamentary Papers.

Two blue books have already been presented to Parliament on the subject of purchasing horses at the Cape for the use of British soldiers in India. The book under review brings together the papers of the former blue books and adds two documents, one by the Auditor General and the second by Colonel Apperley, the remount agent.

On the 11th February, 1857, the Government of Fort St. George submitted to the Honorable Court of Directors certain correspondence with the Commander-in-Chief and the Commissary General on the subject of procuring horses from the Cape. The letter of the Commander-in-Chief is dated the 29th July, 1856. His Excellency was even then sure that the Cape Colony was able to furnish an unlimited supply of Cape horses fit for all military purposes, and that such horses would be fifty per cent. cheaper than the average price of remounts furnished either from Bombay, Australia or the studs; so convinced was His Excellency of the soundness of this opinion that he forwarded a report for Captain Gall of the 5th Regiment Light Cavalry. This report is dated the 31st of January, 1856, and had been written on the return of that officer from the Cape in 1854, at the particular request of the Commander-in-Chief. The opinions of Captain Gall were formed on the spot by personal

intercourse with all classes from whom there seemed a probability of obtaining sound information, and by a journey into the interior. He visited the principal breeding establishments of the Colony, particularly those belonging to Messrs. Melck and Kotzé on the Great Berg River, and those of Mr. Bayley late of the Bengal Civil Service in the Caledon district. At such establishments he found the horses of a breed fit for the finest cavalry, and he occasionally even met small farmers possessed of very valuable mounts. Captain Gall in his report does not rest satisfied with the results of his own experience but is at the pains to condense certain correspondence relative to purchases made on accounts of Her Majesty's and the Honorable Company's Governments.

On the 7th and 19th March, 1846, the Right Honorable Mr. E. Gladstone, the Secretary of State, wrote to the Cape Government requesting that they should at once take steps to purchase remount horses for the cavalry and artillery services of the Honorable East India Company. The horses were to be procured by the same method as was employed in the mounting of the 9th Dragoons, were to be of the same average price, and were to be as far as possible stallions. The authorities at the Cape lost no time, but gave a contract to one Mr. Muter, a saddler of Cape Town. After ten months, however, the contractor only furnished fifty horses for the Government. The price at which Mr. Muter contracted to provide the requisite number of horses was for each stallion, £35, and for each gelding £30. As the average price of a stallion was then not more than £25 and of a gelding not more than £20, including all charges incidental on a journey from the interior to Cape Town, it is clear that Mr. Muter did not fail in his contract from the smallness of the sum offered for each horse that passed the Board selected to approve or reject Mr. Muter's purchases. Indeed from the correspondence it appears that in one instance at least Mr. Muter gained cent. per cent. Neither did the contract fail from the paucity of good horses at the Cape. For in 1838, Colonel Havelock at the instance of the Bombay Government purchased a batch of fifty horses of which after eleven years' service no less than thirty-eight were still found in the ranks. Moreover in 1843, H. M.'s 7th Dragoons were remounted at the Cape, and Colonel Richardson thus remarks on the horses furnished to the corps, he says:—"The horses, in general, are quiet, good-tempered, and steady in the ranks, and the gregarious propensity of the animal is, and has been, the chief difficulty to overcome, as exemplified when required to firmish or work at open files. When vicious, they are treacherously so. Confirmed vice, however, with proper treatment, I think, will rarely be found to exist. From

the many essentials and general activity they possess, I conceive the Cape horse to be eminently adapted for the mounting of cavalry.

"The proportion of geldings to stallions now in the regiment is nearly as two to one. I consider the former preferable, being, I think, equally serviceable, and much less troublesome, both in quarters and in the field.

"The appearance of the horses, in a body, is undoubtedly good, from the uniformity of stamp and excellent condition, and their speed is quite equal to the regulated pace of movement and evolutions. With respect to the charge, it could not probably be made so effectively upon horses, so much smaller than the British trooper.

"The horses, generally, have proved sound in constitution and limb, and I consider them by no means predisposed to disease of any kind. On the contrary, the average sick has certainly been infinitely smaller than usually found in a like number at home."

Now the average weight of the men of the 7th Dragoons was nineteen stone, and yet notwithstanding the supposed lightness of Cape horses Colonel Richardson was able to consider "the 7th Dragoons to be mounted averagely well with the cavalry at home."

The failure of the Government contract with Mr. Muter then arose for no inherent defect as to price or quality in the Cape horse, and Captain Gall deduces from the whole correspondence and from his own experience the following practical results :—

"1st. That the Cape Colony is able to furnish an unlimited supply of horses, fit for all military purposes.

"2nd. That whilst the horses will be procurable at a price not exceeding that given for our present remounts, a great economy will be effected from their being equal to draw or carry heavier weights, with an activity second only to that of *very select* English horses.

"3rd. That all the evidence we have, only warrants a conviction that the decisive experiment, founded on better knowledge, remains yet to be made, as shown by our *partial success*, when 'excellent' horses were supplied to the Hussars in Bombay, but at an exorbitant price; and by our *partial failure* at Madras, where the price was moderate, but the horses were condemned.

"4th. That the intervention of contractors, brokers, and stable-keepers must be *forbidden*."

In 1856, the Commissary-General in the Madras Army reported favourably, on the merits of Cape horses and the following advertisement was by his advice published in the official Gazette of the Cape Government :—

" Notice is hereby given that Cape horses (entire or geldings), to the extent in number of one hundred, will be received by the Commissary-General at Madras, every year, until further notice, commencing from the 1st January, 1857, upon the following terms:—

" The horses are required to be not less than 4 nor more than six years old on delivery, and not under 14 hands 2 inches high.

" Each horse must be free from vice, blemish, or any defect whatsoever which may constitute unsoundness of wind, limb, or vision; to be of good constitution, with free action, sufficient bone, general substance, and symmetry, to render him in every respect fit for Horse Artillery or European Dragoons, to be judged of by a committee of officers at Madras.

" The horses will be at the risk of Government, immediately upon being passed by the committee, which shall be assembled as soon as the owner of horses may wish; but for no less a number than ten at a time, except under particular circumstances.

" The horses will be paid for, after being passed by the committee, at the rate of 575 rupees each."

The papers which have been thus briefly summarised were submitted by Mr. Hope, Auditor General to Colonel Apperley, Remount Agent at the Cape, accompanied also by a memorandum. To this memorandum and documents Colonel Apperley returned the following answer:—

" I am much obliged for the additional papers relating to the supply of remount horses for the Indian army, from the Cape of Good Hope. They arrived just as the last mail was leaving, so I despatched the few copies I received at once to the different authorities at home. Had there been a little more time, I should have asked you to add a few remarks of my own to the publication.

" I might be able to suggest a few hints, calculated to assist the horse-breeders of this colony in producing the right sort of horses, should the Indian Government continue to purchase remounts from these shores

" Your memorandum, which forms a preface to the correspondence and opinions of former remount agents, and their system of purchasing army horses, throws much light upon the subject, particularly with reference to the capabilities of the colony to supply the Indian army to a very large extent with the description of horse that has proved itself able to stand the climate, and in other respects to be well adapted for that service.

" You very justly observe, that Cape horses are peculiar animals; but I beg to differ with you, when you assert that their points of excellence are not those laid down in books. I admit

they are not handsome ; but they surpass any horses I have ever seen out of Europe in the following points ; and I will commence with the fact of their untiring and unflinching endurance during the longest and hottest days of the year.

" Their journeys are always calculated by the farmers, not by the number of miles they can travel, but the number of hours of daylight. If you ask a farmer how far he is going, he replies, only eight or ten hours, which journey will average nearly seven miles an hour, the only refreshment being an occasional drink of water and a roll in the sand, which is supposed to make Cape horses quite fresh again ! This is no overdrawn character of the animal, and I mention it first, as I consider good bottom the great quality in horse-flesh.

" The Cape colonists can never sufficiently express their gratitude to the late Lord Charles Somerset and the present Mr. T. B. Bayley. It is to the valuable English blood imported by these gentlemen, that the Cape horses date their excellence, and the farmer dates his prosperity. He now trots his produce to market behind eight well-bred horses, instead of the old slow and cumbrous span of eighteen pair of oxen.

" Good legs and feet, plenty of bone below the knee, depth of chest, with well-placed shoulders, great substance and broad hips, sound wind and eyes, with generally good action and temper, form the remaining good points possessed by the Cape horse to an extent hardly known elsewhere, to which may be added, wonderful soundness of constitution, in proof of which I may mention, amongst all the horses I have examined, I have only seen *one* whose feet had suffered from fever, although hundreds in regular work had never been shod in their lives, even Cape race-horses generally run barefooted on the very worst of race-courses. It may be argued that leaving the hoofs in a state of nature, unbound by iron, produces this general soundness ; but that will not hold good at Cape Town, where some of the shoeing-smiths are the worst I ever beheld, and I see horses travel sound on shoes that would astonish an English farrier.

" Blindness and broken wind are almost unknown in the colony. At first I was led to suppose that the almost total absence of inflammatory diseases arose from the spare diet on which Cape horses are reared and kept ; but such is not the case. I have purchased hundreds of horses in very bad condition, and it being essential that they should, as far as possible, reach India fit for immediate work, I forced them (in crowded stables) with as much corn as they could eat, and being unable to procure the required quantity of bran for the voyage, have been obliged to feed highly on corn and oat-hay (which is one third grain) at sea. Under this treatment the casualties have been very few,

only three dead horses have been dragged out of the remount stables, and the mortality at sea only two per cent. out of the ten crowded ships that have already reached India.

"I have a very high opinion of the present Cape horses, particularly with reference to their fitness for the ranks of the Indian army, but there is much for the breeders to consider with reference to the parent stock, and I strongly deprecate the use of Arab stallions. I have rejected great numbers of horses said to be half Arabs, that were too slight and weedy for any army purpose.

"Lieutenant-Colonel Bower's description of the expanding property of the desert blood, as exemplified by the stock of the Arab galloway *Wild Duck*, in England, does not prove its fitness for the Cape, where no Yorkshire meadows are to be found, and where most of the brood mares fall into miserable condition, once, if not twice, each year, from the want of pasturage

"Poverty, in any shape, is the death-blow to Arab stock. Its tendency, under the best care, is to run light. Arab blood will never rectify defective forelegs. I have found it fail in Indian studs, and witnessed the weedy, under-sized, under-limbed produce of Arab horses in England, France, Germany, and Prussia. Lieutenant-Colonel Bower having had a *Dreadnought* colt or two that could carry 10 stone 9 lbs. a mile and a half in 3 minutes 10 seconds on the Cape race-course, is no criterion of that horse being able to get good troop-horses!

"During nine years that Colonel Hunter had charge of the central stud in Bengal, the number of Arabian stallions ranged from nine to thirty-four per annum, in general use upon the government mares, who had plenty of good English blood in their veins,—in the whole of which period only fifteen Arab produce were taken for the Horse Artillery, for which branch of the service the finest horses, possessing good bone and substance, were invariably selected, and one horse, by name *Nugent*, was the sire of nine of them.

"I am much amused at Colonel Bower's sweeping abuse of the good-for-nothing Bengal stud-horse. The use of the Arab sires did considerably injure the Indian stud-bred remounts, but they did not disgrace themselves in the Affghan war. The Bengal Horse Artillery had nine pounder guns, and twenty-four pounder howitzers, and heavy gun carriages, with 169 horses per troop;—whereas the Bombay Horse Artillery had upwards of 200 horses per troop, and only six-pounder guns on draft; consequently it is unfair to draw any comparison between them. One reason given from Bombay and Madras against the adoption of the Bengal gun-carriage being that their Arab horses were too light to drag them. I merely mention these

facts to deter the Cape breeders from falling into an error that will be detrimental to their horse stock and their interests also.

"Another circumstance connected with the success of any remount agency that may ever be established at the Cape of Good Hope is the miserable condition the farmers keep their horses in during many months of the year. No remount agent is justified in buying a single horse if he is not in proper condition for immediate shipment. Although I have done so consequent upon the urgency of the present demand, I shall never do so again. This is the great drawback to the success of horse-dealing in this country. An old and true English saying is—'The value of a horse goes down his throat;' hence the superiority of the English horse over any other. If the Cape farmers could be induced to feed their stock liberally, their horses would be much larger and stronger, and their returns certain. I am obliged, at this moment, to suspend operations, because all the horses in the country are out of condition, and as thin as hurdles.

"I trust, as immigration increases, more acres may fall under the plough. If each farmer sowed an acre of oats over and above what is intended for sale, for each horse he had to dispose of, it would ensure good condition at a very trifling cost all the year round, and enable the remount agent to give him a liberal price for his colt, when required for immediate shipment, which is rendered impossible if the expences of a depot for a couple of months are to be thrown upon the horses before they can be shipped.

"How far the blue-books may reach the dwellings of the Cape horse breeders and farmers I cannot say, but I think there is much valuable information in the reports of Lieutenant-Colonel Bower and Captain Gall, that they ought to read, particularly with reference to what are considered remunerative prices, &c. War prices must now cease, and the continuation of the demand from India for horses will become a matter of pounds, shillings and pence.

"The unsatisfactory results from committees, at different times assembled to report upon Cape horses in India, have been so ably explained away by both Lieutenant-Colonel Bower and Captain Gall, that I shall only record my opinion that I feel satisfied when the Cape horses that I have sent on have had time to recover, after the sea voyage, and have been fairly tried in the ranks, they will be as favorably reported upon as those formerly purchased by Colonel Havelock were after 11 years' service. They arrived in the Crimea in better condition than any other horses in the regiment! A committee had disapproved of these horses, and much fault was found at first with the horses the 7th Dragoon Guards were mounted upon during the Kafir war.

After a period, that regiment was reported by Colonel Richardson to be as well mounted as the average of cavalry at home, and no privation or fatigue could make General Cathcart's horses succumb, although the men in marching order averaged over 19 stone! In the face of such facts, members of remount committees should pause before they condemn untried horses, and the professional gentlemen should bear in mind that Professor Coleman's opinion of what constituted a sound horse was 'a horse that could perform the *ordinary* labors of an *ordinary* horse,' beyond which he could not pronounce any horse sound.

"If the Cape gentlemen will accept my humble advice, I hope they will continue to breed from as much good English blood and bone as their money will procure, and cross their mares that have Arab blood with the best description of Norfolk Trotting or Cleveland stallions procurable. No other cross will restore size and substance from that description of mare until the Arab blood becomes absorbed in many successive generations. By paying a little more attention to the feeding of their horse stock, generally, the breeders will find a ready market and remuneration, unsurpassed by any other speculation that this colony is capable of."

The report of Lieutenant Colonel J. Power, to which the foregoing extract alludes is contained in this collection and appeared first in the *India Sporting Review* for August, 1857. Since that time, that is between 12th August, 1857, and the 15th May, 1858, two thousand and five hundred and sixty-nine horses have been despatched from the Cape to India and of these only twenty-six died in the passage. In addition to these horses four hundred and ninety were in June, 1858, either embarked or embarking for India, and one hundred and four mules had been despatched on the *Henry Ellis* to Calcutta. Of these mules ninety-nine landed in good condition. The foregoing statements do not include horses shipped at a venture by private persons for India. The number thus shipped in 1857, was five hundred and forty-six.

EDUCATION IN THE MADRAS PRESIDENCY.

1856-57.

Madras Records, No. XLIX.

MR. ARMYNTAFT submitted on the 28th October, 1857, his report on the progress of education in the Madras Presidency during the financial year 1856-57.

The annual examination of the Presidency College in the

year under review was considered by many of the examiners as unsatisfactory. But Mr. Arbuthnot thought the answers of the students somewhat severely judged. Some of the papers were of considerable difficulty and unduly long. He concurs however with the opinion of the examiners in moral philosophy and political economy, but thinks the latter to be too difficult a subject to be commenced by any but the most advanced students in the College. The legal branch of the College was closed during a considerable portion of the year, there were but forty-nine students. In the general branch there were at the close of the year, 262 students with an average attendance of 241, of whom forty-eight belonged to the senior department. The questions proposed at the annual examination of the students of the Presidency College are appended to the report and some of the more promising answers are given.

The Normal School was opened on the 1st March, 1846, its objects are to provide teachers for Anglo-Vernacular and elementary Vernacular schools. Six months after its opening the Principal proposed the permanent division of the primary school into two schools, one of which was to be called the practising school, to be taught by pupil teachers, and the other the model school. The arrangement was sanctioned by Government but up to the publication of the report its organization was incomplete. The cost of the Normal School is about Rs. 2,000 a month, or deducting fees and adding contingent charges 1800.

Of the "four Government Provincial schools, the institution at Combaconum still maintains the highest place. The number of pupils on the rolls at the close of the year was 262 with an average attendance of 266. The result of the annual examination is reported by the Inspector to have been in the highest degree satisfactory. In the English department more especially a decided progress had been made in every branch of study, and in Mr. Richards' opinion the whole aspect of the school gave indication of a steady advance towards a system of education of a comparatively high order, and at the same time solid and useful." The Inspector's report is subjoined.

The Bellary school progresses, but at Calicut the Head-Master complains of the want of efficient junior teachers. The most unfavourable report is from Rajahmundry, the instruction throughout has been inefficient, and the condition of the school, generally, very discreditable to the Head-Master's management.

The following is a comparative statement of the attendance at the four provincial schools:—

NAMES OF SCHOOLS.	<i>No. on the rolls.</i>	
	<i>30th April,</i> 1856.	<i>30th April,</i> 1857.
<i>Combacorum,</i>	249	262
<i>Bellary,</i>	173	210
<i>Calicut,</i>	79	176
<i>Rajahmundry,</i>	72	107
<i>Total,</i>	573	755

Five zillah schools only have been established in the Madras Presidency. They are:—

SCHOOLS.	<i>Attendance.</i>	
	<i>30th April,</i> 1856.	<i>30th April,</i> 1857.
<i>Cuddalore,</i>	158	152
<i>Chittore,</i>	198	185
<i>Salem,</i>	133	195
<i>Madura,</i>	<i>Not established</i>	163
<i>Berhampore,</i>	<i>do.</i>	168
<i>Total,</i>	489	863

The Government have sanctioned the establishment of eight such zillah schools.

With regard to the Anglo-Vernacular schools Mr. Arbuthnot states that the following points have forced themselves on his attention:—"1st. The comparative inefficiency of the majority of the junior teachers, and the necessity of constant and active supervision on the part of the Head-Masters over the classes not under their immediate charge.

"2nd. The general inefficiency of the Vernacular instruction.

"3rd. The expediency of providing for instruction in the more elementary branches of mathematics, history, geography, &c. being imparted through the medium of the Vernacular."

Twenty-one private schools of the same standard as the Government zillah schools were examined during the year, grants-in-aid to the amount of Rs. 30,000, have been sanctioned by the Madras Government, and an application has been made to the Supreme Government for expenditure on grants-in-aid to the amount of Rs. 65,000 per annum. The total attendance at all the Anglo-Vernacular schools supported by or under the protection of Government was on the 30th April, 1857, 5741.

"Of the 100 talook schools sanctioned by the Government of India, twenty-eight were brought into operation during the year."

The aggregate attendance of these schools was 1148 or forty-two pupils for each school. The course of instruction at such institutions comprises reading, writing, grammar, geography, Indian and general history, arithmetic as far as decimal fractions, algebra as far as simple equations, and the elements of geometry, mensuration, surveying and the vernacular classics. Instruction is given entirely in the vernacular. The cost of the buildings for the talook schools is defrayed by the inhabitants of the talooks assisted by a supplemental grant.

In Rajahmundry the vernacular schools supported by a local rate are favourably reported on by the Inspector of the Division. Their number has increased to eighty-six and they have an attendance of about 3,000 pupils.

In the hill tracts of Ganjam four additional schools were established in the year under review, and the Superintendent discharged for incompetence.

Considerable attention had been paid during the year to the preparation of vernacular educational books, and the vernacular newspaper edited by the Professor in the Presidency College was successful. Its circulation at the close of the year was one thousand. It is printed both in Tamil and Telugu.

The condition of the Medical College may be estimated by the results of the last annual examination. "The results of the examination were as follows:—Of the 2nd dressers who came up for final examination as candidates for diplomas, one passed. Three 2nd dressers and two stipendiary students who underwent their first examination as candidates for diplomas were most favorably reported on by the committee. The three former are stated to have passed a highly creditable examination in each of the subjects in which they were examined. Of seventeen medical apprentices who were examined for admission to the grade of assistant apothecary, twelve came up to the prescribed standard. Five others who failed to reach the prescribed standard were considered by the committee to have obtained a rudimentary professional education sufficient to make them, with hospital practice and experience, useful subordinates and equal to the position they are intended to occupy in the service, and were accordingly recommended for admission. Four medical pupils were passed as second dressers. Their attainments the committee appear to have considered somewhat below the mark with reference to their having received three years' collegiate instruction, but sufficient for the subordinate duties they are destined to perform."

The committee of medical officers who examined the College suggested that the course of study presented for native medical pupils and medical apprentices should be modified as being un-

necessarily high. They also thought that there should be some change in the constitution of the governing body.

The condition of the industrial arts school is not altogether satisfactory. The attendance has been extremely small, and the connection between the artistic and industrial department has been little more than nominal. With the exception of brick-making, which, however, should be carried on to a very limited extent, the work done in the industrial department may be classed under the general head of pottery. In the artistic department the work done has been so arranged as to extend over a period of four years. A copy of the scheme of instruction is annexed.

The Government of India in their orders of the 5th January, 1856, sanctioned the assignment of Rs. 1,500 per mensem for the establishment of scholarships. Of this sum Rs. 500, was assigned to the Normal school.

"The scholarships may be classified as follows:—

"1st. Scholarships to be competed for by the pupils in a Government provincial school or other institution equally advanced and tenable in the institution itself; or at Madras, either in the Presidency College or the Government Normal school.

"2nd. Scholarships to be competed for in a Government Zillah school or other school of an equal grade and tenable in the school itself or in the provincial school of the division or other school of an equal grade.

"3rd. Scholarships to be competed for in a talook school or other school of equal grade and tenable in a zillah or other superior school.

"The sum sanctioned for scholarships for the entire Presidency is Rupees 1,000 per mensem, of which Rupees 200 must be set apart for the Presidency. The balance, Rupees 800, will admit of an average allotment of Rupees 40 per mensem to each district to be distributed among the several schools of the three grades above referred to, which are either supported by Government, or by means of grants-in-aid, are brought into the Government scheme.

"This sum will of course be inadequate when the educational measures now in progress shall have been extended throughout the Presidency, but for some time to come it will be more than ample to carry out the objects in view. Its allotment should be regulated with reference to the number of schools in each district, the number of pupils attending them and the standard of education."

The fee system has been very generally introduced. In the Government schools the system has all along been enforced on the following scale:—

	Rs.	As.	P.	
In the Presidency College, ..	2	...	...	{ Per mensem for each pupil.
In the Primary school attached to the Normal school at the Presidency,	1	...	...
In the Provincial and Zillah schools,...	8	...	...
In the Talook {				
In those classes in which				
English is taught, ...	4	...	...
In the other classes, ...	2	...	...

The subjoined table classifies the pupils receiving instruction in the Madras Government schools :—

Institutions.	Number of pupils on the rolls on the 30th April, 1857.		Hindoos.		Mahomedans.	Christians.	Number of pupils under instruction.					Number of pupils whose parents or guardians reside at places distant from the school.						Number of pupils whose parents are in Government or other employ, and receive salaries.			
	Brahmins.	Other castes.					More than 5 years.	More than 3 years.	More than 2 years.	More than 1 year.	Less than 1 year.	Less than 10 miles.	More than 10 miles.	More than 100 miles.	More than 300 miles.	More than 500 miles.	Less than Rupees 10 per mensem.	More than Rupees 10 per mensem.	More than Rupees 100 per mensem.	More than Rupees 200 per mensem.	More than Rupees 500 per mensem.
1 Presidency College,	79	146	4	3121	59	31	46	103	237	15	8	0	0	2	118	19	5	2			
1 Normal School,	25	258	5	38	0	34	43	86	163	295	15	12	1	3	28	130	7	0			
4 Provincial Schools,	318	298	17	123	0	11	203	138	407	577	154	16	2	7	97	297	23	12			
5 Zillah Schools,	286	479	29	59	0	49	29	254	521	764	80	8	0	1	108	308	18	6			
27 Talook Schools,	319	774	71	18	0	0	0	1182	1173	9	0	0	0	258	132	10	2	0			
Total,	1027	1955	126	269	21	153	303	524	2376	2946	273	44	3	11	493	985	77	25			

The report contains detailed tabular statements as summarised.

REVISION OF THE VILLAGE ACCOUNTS OF THE MADRAS PRESIDENCY.

THE Secretary to Government in the Revenue Department observes :—" On the 7th November, 1854 when expressing their wish for the disuse of Mahratta as the language of the revenue accounts, the Government also called the attention of the Board of Revenue, to the general system of revenue accounts followed in the Mofussil ; both in the talooks and in the district offices, in view to its revision and simplification. The Board cordially took up the subject ; and in order to an effectual revision, recommended that Jayaram Chetty, Head Accountant in the North Arcot Collector's Cutcherry, who had already been engaged in investigations of the same nature, might be nominated a special uncovenanted assistant in their office, to superintend it. This proposition was approved, and was immediately carried into effect. The proceedings in view to the revision of the accounts were begun forthwith in the Board's office ; but Jayaram Chetty having, at the beginning of March, 1855, been appointed to a post in the revenue department of the Government office, the enquiry was transferred thither, and has since proceeded under the general control of the Revenue Secretary to Government.

" The plan comprehended the revision and improvement of the whole system of accounts, and the enquiry naturally commenced with those of the villages, which are the foundation of all the rest. This part of the proceedings has now been completed, and new forms for the village accounts have been prepared, and an able memorandum has also been drawn up by Jayaram Chetty, detailing the system of village accounts now existing, and explaining the proposed reforms. The sets of forms are three in number ; viz. one for the ordinary ryotwar field assessed villages ; one for the Oolungoo villages, found in Tanjore and Tinnevely only ; and one for Amany villages. The object of the reforms proposed is to substitute brevity, order, simplicity and clearness, for the prolixity and repetition, the utter want of system, the complexity and the confusion, which so eminently distinguish the existing village accounts. This object has been attained in a high degree ; quite as much probably as is possible when the revenue system to be dealt with is itself so complicated, and so full of variations in detail. The forms are still very numerous and full of detail, but this is not the fault of the accounts, but of the revenue system, to which the accounts must necessarily be adapted.

" The most important of the three sets of forms is the first,

viz., that drawn up for field assessed ryotwar villages, because these forms will have by far the most extensive application. This mode of settlement prevails almost universally where the zemindary and moottadary systems are not in use, except in Malabar and Canara, in Tinnevely, and in part of Tanjore. It is in operation over a large part of all the districts, and is that to which the term ryotwar is in common speech exclusively applied. The Oolungoo system exists in Tanjore and Tinnevely, extending in both cases over the greater part of the district; the Amany system, which is, that of a division of the crop between Government and the ryot, is found only in a very limited number of villages in a few districts.

"The ryotwar forms, (so to call them,) being thus the most important, received the first and the most careful attention. They were first drawn up with more immediate reference to the particular systems in North Arcot and Chingleput; but subsequently the special assistant carefully examined the jumma bundy and other statements in the Board's office, from all the Collectorates, as well as the hookoomnamahs of all, and by a few alterations, suited them to convey all the information now required by the Board from all the ryotwar districts. Before being finally settled, they were subjected to the criticism of all the most intelligent of the Tahsildars of North Arcot, as well as to that of many clever and skilful Curnums; and all the objections raised by any of these persons were either answered to their satisfaction, or were removed by the necessary modification of the forms. -

"Lastly, the forms have all been submitted to the examination of the able and experienced Head Seristadar of the Board of Revenue, who after suggesting a few amendments, which have accordingly been made, has given them his full approval. Nor is this all; the forms have also been tried in actual use. In Fusly, 1263, they were first introduced in North Arcot at the jumma bundy. They were not applied then to the whole district; but in a few villages of the talooks of the most intelligent Tahsildars; ten or twenty villages in each such talook. In the following year, *viz.*, in Fusly, 1264, (now current,) they were put in force throughout the whole of the Government talooks of the district, from the very commencement of the season. The result has been fully satisfactory. At first their novelty caused some opposition among the Curnums. But this was overcome; and now the Curnums fully admit the benefit to themselves by the saving of time and trouble, while the Collector and the Head Seristadar find the new system a vast improvement as respects clearness, ease and expedition, both in making the

settlement, and in the Azmoyish and other operations which precede it.

"Having thus been tested by the close examination of skilful and experienced accountants and revenue officers, and having been proved by actual trial, these forms may now be considered to be in a position to be brought into general use; and having been so introduced, minor changes and improvements will probably suggest themselves. They should on no account however be varied or departed from by the local officers, without orders; because such partial changes make comparison and compilation difficult or impossible, and so render the accounts useless for one of their most important purposes. Columns should neither be added, taken away, nor their numbers altered; if in any case additional information is to be given, it may be given in the column of remarks. It has already been said that the forms are, still, more numerous and more detailed than might be wished; but so long as the present revenue system remains, with its multifarious remissions, the inevitable accompaniment of high assessments, greater simplicity is unattainable. It will be a vast gain, however, to substitute systematic and orderly accounts for those now in use; and when the revenue system shall happily be simplified, the accounts also can easily receive corresponding simplification merely by the omission of certain parts.

"In some cases it will be found that the new forms diminish the amount of information, now sent from the villages to the talooks in some Collectorates, as for example, in providing only monthly reports of cultivation, whereas at present those reports are more frequent in some districts. It is believed however, that these forms provide for all necessary ordinary information; and it is superfluous to point out that to require more, not only causes needless trouble, but if carried far, may be made the occasion of much annoyance and exaction. If in any case however, a Collector shall be of opinion that the information provided is deficient, or that the forms are defective or open to objection in any way, it should be left open to him to represent his objections for consideration.

The forms for the Oolungoo and the Amany villages were drawn up after a careful examination of the jummaundy and other returns for villages of those descriptions, and in consideration of the information necessary respecting them, both to the Collector and to the Board. In the case of Tanjore too, they were tested by comparison with the detailed accounts of a village procured from the district for the purpose. In general, it is believed, these forms will be found suitable and adapted to convey all the information required; but as there has not been the opportunity of verifying these, like the ryotwar forms, by

actual trial, it is possible that they may be found not to provide for all local circumstances. When that is the case, the circumstances may be represented, in order that, if necessary, the form objected to may be modified; and in the meantime one or more columns may be added at the right hand of the form. But before either adding to the form or advising its modification, Collectors should carefully consider both, whether the particular in question can be brought into the form as it is, and whether if not it be really necessary.

"As regards Malabar and Canara, the greater part of the forms relating to cultivation and settlement, will not be found to be necessary or to be applicable; because of the difference of system there, and its much greater simplicity, especially in Canara. But all the forms connected with collection and the remittance of money to the talooks, will be found suitable there also, and should be adopted. The whole of the forms may be furnished to those districts, and the Collectors should be requested to consider them, and to report which of them are altogether inapplicable and unnecessary, and which may be modified so as to be useful, and what those modifications should be. They should be such as to harmonize with the general system of the forms, and to admit of the whole being abstracted into corresponding tables for the entire presidency.

"Independently of the alteration in the form of the accounts, and the uniformity, order, brevity and avoidance of repetition, thus secured, the new forms involve two general changes in the existing system, which may here be noticed. These are, 1st, 'the abolition of the cadjan or palmira leaf as the material of the Curnums' accounts, and the substitution of paper, and 2d, the discontinuance of the practice of transcribing the Curnums' accounts, for the use of the Serishtadar.' Of the superiority of paper over cadjan there can be no question. The latter, from its very nature, viz., from the narrowness of the slips in which alone it exists, is incompatible with clearness or order in accounts; and of necessity it involves additional labor, because the items have to be added up after every five or six lines and carried forward to a new leaf. Further, these cadjan accounts have hitherto been a sealed book to all but the village Curnums and a few others, as the generality even of talook officers are incapable of reading them with facility; and as a consequence the authorities are wholly dependent on the Curnums.

"Paper has long been used for the village accounts in some districts, in Canara, in Guntur, and in other of the Northern Circars, in the Mysore Country, and in the parts of Salem and North Arcot above the Ghauts; it has also been brought into general use throughout North Arcot in the current Fusly. In

the Southern districts, where hitherto the cadjan only has been used, the change has still to be made; but this may be done without material difficulty. The Curnums will at first be opposed to the change, and plead inability to write on paper: but if assured that the change is inevitable, and treated with forbearance and not too hardly pressed while it is in progress, they will soon fall into it. Many of the Curnums will be found to have already more or less familiarity with the use of pen and paper, others have sons or nephews possessing that skill, and the remainder will obtain temporary assistance in one way or another, and in doing this, the Tahsildars may be able to aid them. The example of North Arcot fully proves that the change may be effected, and at very short notice, if only it is known that it must be made, and if underhand opposition is discouraged. The experience of the same district proves also that when once familiarized with the use of pen and ink, and with the new forms, the Curnums themselves will be greatly pleased with the change, easily realizing the great relief in various ways thence accruing to themselves.

"The extraordinary practice of having all the village accounts transcribed for the use of the talook and hoozoor officers, is due no doubt to two circumstances: 1st, the use of cadjan as the material of those accounts, which is as inferior in point of legibility and handiness to written paper, as the latter is to print; and 2d, to the adoption of Mahratta generally as the language of accounts in the talook and district cutcherries. Up to a few years ago the superior talook and district native revenue officers were generally unable to read or write the vernacular languages, and even the correspondence between the talook and the Collector's office was in many districts conducted in Mahratta. Independently then of the difficulty of reading cadjan, the officers making the jumma bundy settlement were unable to deal with the village accounts until they were rendered out of the vernacular into Mahratta. The tedious process was therefore adopted of having the village accounts dictated by the Curnum in the vernacular language in which they were written, and taken down in Mahratta by a gomastah. For this sole purpose numbers of additional or temporary gomastahs have every year been entertained at considerable charge, in every district; and not only at the jumma bundy, but at all seasons, much labour is wasted by the talook gomastahs, in taking down accounts of cultivation, of collections, of remittances, and various other accounts, from the village Curnums, in Mahratta, for the use of the talook cutcherry.

"All this purely gratuitous labour will now be swept away. The supersession of Mahratta by the vernacular languages has

been slowly advancing for many years; its use in official correspondence is believed to have wholly ceased some years ago, and in various districts it has from time to time been discarded in particular branches of the accounts, especially of the maramut department. In a few districts Mahratta has never been used at all, except for the copying of accounts sent to the Board of Revenue. As a consequence of this progressive change, the art of writing the vernacular has greatly increased in the talook and district cutcherries; and there are few gomastahs now, except some of the oldest, who are entirely ignorant of it. Thus the way was gradually prepared for the general abolition of Mahratta as the language of account; which was ordered by Government, on the report and with the concurrence of the Board of Revenue, and which the Board have directed to take effect from the commencement of Fusly, 1265.

"The two causes which led to the practice of transcription having ceased to exist, that practice will naturally cease also. The very accounts written by the Curnums will henceforward be dealt with directly by the talook and district officers. This change will not only save much time and labour of the gomastahs, now uselessly employed in taking down the accounts, but it will also save the Curnums many needless journeys to the talook cutcherry to dictate and give in their periodical returns, which hereafter will be sent by the ordinary village messenger, or by the talook tappaul, as the efficiency of that establishment increases. The change, however, will be most important perhaps in the jumma bundy accounts. Hitherto the jumma bundy has been a work of enormous labour, as well as occupying much time; chiefly because of the many voluminous accounts, which had to be first prepared by the Curnums and then transcribed into Mahratta by gomastahs, and in like manner the Azmayish, or inspection of cultivation preparatory to the jumma bundy, has taken much time and so delayed the settlement, because before making the Azmayish the gomastah had to take down the whole cultivation account in writing.

"Under the new system all this will be dispensed with. The very same statement in which the Curnum enters the cultivation, from the commencement of the season, will serve the purpose both of the Azmayishdar and of the settling officer. The former, coming to the village to be examined, will at once have the statement put into his hands by the Curnum, and in a much more convenient form than he has been in the habit of taking it down for himself; and he will proceed to the fields, make his inspection, and enter his remarks in the proper column, and return the statement with his signature to the Curnum, and at the settlement this very statement will be produced; the set-

thing officer will consider it, with the aid of the Azmayishdar's remarks, and will at once pass orders on the doubtful or reserved points, and nothing will then remain for the Curnum but to make up the totals, and extract certain particulars to form into short-figured statements on particular subjects. Thus the settlement of a talook may be easily completed within a week from the time when the Curnums first began to assemble, instead of occupying six weeks or two months of extreme labour, as at present, nor is the saving of time and labour the whole gain, it will be possible now to examine and verify the Curnums' accounts, an operation which has hitherto been impracticable from sheer want of time, in the pressure and confusion of the jumabundy business.

"For the saving of labour and expence, as well as for uniformity and accuracy, it is very desirable that all the forms should be printed. For the present year it is proposed that they should be printed accordingly at the Government Press, in Fort St. George; but partly for want of time, and partly from its being impossible to obtain all at once in Madras, the large quantity of paper required for the whole, it will only be practicable to print the external sheets, and where more are required, as will be the case in all the large forms, sheets ruled by hand must be added. In future years, it is to be hoped, that it will be in the power of every Collector to get his forms printed, either at his own office Press, or at that of an adjoining district, and not merely the external sheets but the full number required. For the guidance of the Curnums and others, in the use of the new forms, a manual has been drawn up by Jayaram Chetty; arrangements have been made for printing this, both in Tamil and Teloo-goo, with a view to placing a copy in the hands of every Curnum. The talook officers may also be supplied, and thus there will be no excuse for mistakes or delay in the preparation of the accounts.

"When the adoption of the new system of accounts shall be finally decided on, it seems desirable to circulate to the local officers, for their clearer information as to the cause and object of the change, a copy of the memorandum prepared, as above noticed, by the officer especially appointed for the revision of the accounts, detailing the present system and explaining the proposed improvements, and also the original English version of the manual drawn up by the same officer, as a guide in using the forms. These documents will clearly explain to Collectors and to their subordinates both the necessity for the present change, and the great gain which it is calculated to ensure for all the objects of a system of accounts."

The foregoing memorandum is followed by a report on the system of village accounts and the improvements to be introduced.

by S. Jayaram Chetty, whose office has already been mentioned. As Mr. Bourdillon has incorporated the substance of this report, in his memorandum which we have given entire, again to summarise the report would be needless. To the report are appended the forms to be observed for Ryotwar, Oloongoo, and Amany villages.

REVISION OF TALOOK ACCOUNTS IN THE MADRAS PRESIDENCY.

THE Government record bearing the title to be found at the heading of this chapter contains new rules and forms for talook accounts together with a memorandum drawn up on the subject by the Registrar of the Revenue and Public Works Departments of the Secretariat. The new forms were first circulated in June, 1855, the talook accounts then in use in the revenue department being bulky and confused, wanting in uniformity and full of unnecessary repetitions. The new rules and forms were first settled by Mr. Bourdillon and then submitted to the Board of Revenue.

The forms are not of course the same for all districts, there being a want of uniformity in the revenue system of the several Collectorates of the Madras Presidency.

It is manifestly impossible to condense a mere manual of rules, and blank tabular returns are of no interest save to those who make use of them. It is sufficient for this summary to state briefly, therefore, that the present manual consists of six parts:—

- “1st. General instructions.
- “2nd. Cultivation and settlement accounts.
- “3rd. Cash accounts.
- “4th. Returns to be submitted to the Collector.
- “5th. Correspondence with the Collector and the returns to be sent to him in that department.
- “6th. Stamp accounts.”

The appendices to the manual consist of a list of the principal items occurring under the heads of different branches of revenue, forms of cultivation and settlement accounts to be kept in each talook, forms of cash accounts to be kept in each talook, forms of cultivation and settlement accounts to be sent to the hoozoo, forms regarding correspondence, and the returns to be sent to the Collector's office, and forms to be kept in the stamp department.

The first appendix enumerates the principal items occur-

ring under the head of remission, sundry items, the principal items of moturpha and principal items of extra revenue or Sevoy jummah. The second appendix contains monthly forms, namely, two statements shewing the extent of cultivation and assessment in each village, detailed statements of supply and distribution of water in the talooks, and statements shewing the market-prices of grain; annual statements "shewing the cultivation and settlement of each village, of shavy remission, of lands given up, &c., of lands held on progressive cowle, the cultivation of sugar-cane, cotton and indigo, the particulars of the moturpha, the particulars of extra revenue and the amount of interest charged on the arrears of Moottahs, Polliputs, &c.;" quinquennial statements shewing the number of ryots, pot-tahs, &c., the houses and population, the different sources of irrigation, the rent-roll, the Circar and Enam Ayacut cultivation; statistical returns, being registers shewing cultivation and settlement in the ryotwar villages, shewing the beriz of all descriptions, shewing the villagewar Ayacut and cultivation under each source of irrigation, shewing village servants and their yearly incomes, shewing lapsed Enams; and special accounts for Amany villages being statements of the monthly cultivation of the different species of crops, of the produce of the different species of crop "as, Azmoished," of the cultivation and settlement of Amany villages of the seed sown in Ooloongoo villages and of the average prices of nunjah produce of the settlement.

The third appendix to the manual consists of statements shewing the daily receipts and disbursements, and the different description of coins received and disbursed daily, the miscellaneous charges, the demand collection, and balance, the amount of collections on account of arrears, and the particulars of arrears outstanding at the time of settlement against the ryots.

The fourth appendix contains a list of statements to be sent in every ten days, monthly, annually and quinquennially. The statements under the head to be sent in every ten days, show the demand, collection and balance, and the particulars of cash remaining on hand. The monthly statements exhibit the comparative abstract of cultivation and assessment; the comparative for kavar abstract of cultivation of Amany villages; the abstract of the sist collection, and balance; the quantity of rain that fell in the Cus-bah; "the average prices of grain per Madras garce; the average prices of Nunja grain; season report; the suspension and removal of the village officers; estimate of the amount to be retained in the treasury; statement shewing the demand, collection and balance; particulars of balances against Mottahs and Polliems; abstract of cultivation; statement shewing the demand, collection and balance on account of revenue fines; account-cur-

rent of the receipts and disbursements; pay abstract of the establishment; list of pensions; list of miscellaneous items; list of remittances to the hoozoor treasury." The annual statements shew "the number of the different descriptions of villages and hamlets; the prices of grain per Madras garce of 3,200 measures each; the ryotwar settlement; the cultivation and settlement in the Amany villages, the settlement of Amany villages; Ooloongoo, &c., villages; the particulars of Amany villages rented at a reduced grain amount; comparative abstract of settlement; estates granted on Voyda or for bringing them up to the full assessment by instalments; the Hossagamy cultivation or land newly taken up; the assessment fixed on it and the instalments by which this is brought up; the cultivation and settlement of land revenue Beriz; remissions and sundry items; the extent of cultivation and average assessment per acre, lands held on progressive cowle; lands cultivated with sugar-cane, cotton and indigo; comparative abstract statement of moturpha, comparative abstract statement of extra revenue and interest account; comparative abstract statement of all sources of revenue; extent to which coercive process was employed; the Fuslywar demand; collection and balance of Mootahs, Polliaputs, &c.; the particulars of arrears outstanding at the time of settlement against each village; and list of Government servants as they stood on the 30th April."

The quinquennial statement shews "the number of ryots, puttahs, ploughs, &c., of houses, and population; the sources of irrigation; the rent-roll; the Circar and Enam Ayacut and cultivation."

The fifth appendix consists of forms for registers of urzees despatched to the hoozoor, forms of list shewing the number of Takeeds remaining unanswered, forms for list of petitions addressed to the Tehsildar and forms for list of petitions presented in the talook.

The sixth appendix contains forms for indent on the stamp darogah, daily statements of stamps disposed of, monthly accounts current of the stamp transactions and register of stamp papers and cadjans received and sold during each year.

From the foregoing returns it will be seen how elaborate are the reports required from each talooka of the Madras Presidency under the new system.

BENGAL ADMINISTRATION REPORT

For 1856-57.

The number of original suits which came before the Courts of original jurisdiction in 1856, amounted to 1,26,793, of which

number 50,380 were decided on their merits ; 6,577 were dismissed on default, and 29,600 were adjusted, withdrawn and otherwise disposed of. There were thus 40,236 pending at the close of the year. One thousand six hundred and ninety-one cases only came before European judges, Native judges disposing of 84,886 cases. Suits connected with land and land-rent, debts and wages shew a tendency to increase. The increase of suits connected with land is at the annual rate of about twelve per cent. In 1854, on the introduction of the new law of evidence suits for bond debts suddenly decreased twenty per cent., the increase now apparent indicates that the creditors no longer regard with such abhorrence the law rendering them liable to be called into Court.

The proportion of suits decided in favour of plaintiffs is as two to one.

The number of appeal cases brought before the Principal Sudder Ameens during the year was 10,977, of which 1,851 were decided in favour of appellants, 4,200 in favour of respondents, " 980 were remanded, 454 dismissed on default, and 130 adjusted or withdrawn. The rest were otherwise disposed of or *pending* on the 31st December.

"The number of appeals which came before the Additional Judges during the year was 2,377. Of these 156 were decided in favor of the plaintiffs and 404 in favor of the respondents ; 75 were remanded, 27 dismissed on default, and 12 adjusted or withdrawn. The remainder were otherwise disposed of or *pending* on the 31st December.

"There were 14,288 appeals before the zillah or district Judges in 1856: of this number, however, less than one-half were actually heard by the Judges, the greater portion having been merely filed in their Courts and transferred to the Courts of the subordinate Principal Sudder Ameens for disposal. Of the cases which were heard by the Judges, 539 were decreed for the plaintiffs, 1,619 for the defendants ; 542 were remanded, 239 dismissed on default ; 89 were adjusted or withdrawn, and the remainder are entered as *pending* or otherwise disposed of.

"In the Court of Sudder Dewanny Adawlut, there were *pending*, on the 1st of January, 1856, 606 regular appeals and 188 admitted special appeals. To those were added during the year 261 regular appeals and 419 special appeals, making a total of 867 regular and 517 admitted special appeals for decision. During the year 279 regular appeals and 255 special appeals were disposed of, leaving on the 31st December, 588 regular appeals and 262 special appeals. Though the work of the Sudder Court in 1856 is thus shown to have been considerably more than double the out-turn of 1855 or 1854, yet the *pending* file on the 1st Janu-

ary, 1857 was collectively, in these two heads, in excess of that on the 1st of January, 1858. The institutions of regular appeals during the year 1856 were also more numerous than they were in any of the five preceding years, while the admissions of special appeal were of course increased in proportion to the special appeal applications."

The increased number of decisions is owing to the increase of the working power of the Court, to which on the 7th December, 1855, three Additional Judges were appointed. The staff was still found insufficient, and in December, 1856, two extra Judges were appointed. The Sudder Court now comprises the five Judges forming the regular permanent Bench and five extra Judges.

The average duration of suits in each grade appears from the following comparative statement:—

		1855.			1856.		
		Y. M. D.			Y. M. D.		
" Sudder Court,	..	1	3	4	1	5	10
Zillah Judges,	...	0	11	3	0	7	20
Additional Judges,	...	0	9	14	0	11	16
Principal Sudder Ameens,	.	1	0	14	0	10	8
Sudder Ameens,	...	0	9	6	0	9	12
Moonsiffs,	..	0	6	26	0	5	15"

The total value of the suits pending in the Civil Courts at the close of 1856 was Rs. 4,81,90,071. In 1855, the total value of pending suits was Rs. 5,26,77,650.

The Non-regulation Provinces include Assam, Arracan, Chota Nagpore, Tenasserim and Cachar. In Assam 4,922 cases came before the Moonsiffs, who decided 1,578 cases on merits and otherwise disposed of all but 1,048, which were left pending at the end of the year. Five hundred and eighty-three cases were brought before the Sudder Ameens, who decided 206 on merits and otherwise disposed of 325 cases. Of the 583 cases 440 were original suits, of which 187 were decided on merits.

The Principal Sudder Ameens heard 1,583 cases, of which 1,861 were original suits. They decided 706 on merit and left only 272 pending at the close of the year.

During 1856 there were 7,958 cases brought up for the decision of the Assistant Commissioner. Of these 485 were decreed for plaintiffs or appellants; 122, for defendants or respondents, 372 were dismissed on default; 6,606 were otherwise disposed of and 373 were pending at the close of the year.

The Deputy Commissioner during the year under review disposed of thirty-five cases out of forty-seven. The cases pending at the end of the year were all appeal suits.

In Arracan the Tarama Thoogrees of Akyab and Ramree, possessing the same powers as those vested in Sudder Ameens, disposed of 714 cases out of 793 submitted for their decision. Of this number 475 cases were decided on merits and 238 dismissed on default. Seven hundred and eighteen suits were pending at the close of 1855 or received during 1856 by the Assistant Commissioner, who decided 370 for plaintiffs or appellants, 64 for defendants or respondents and dismissed in default 118 cases. On the 31st December, 164 cases were left pending.

The Commissioner decided no original suits during the year but disposed of 55 appealed suits out of 77.

In Chota Nagpore 4,256 cases were brought before the Moonsiffs, 1,177 before the Assistant Commissioner, and 178 before the Deputy Commissioner. The Moonsiffs left 1,394 pending at the close of the year, the Assistant Commissioners 735 and the Deputy Commissioner 61.

In the Tenasserim Provinces 2,162 cases were brought before the Moonsiffs; 4,138 before the Tseetkays, whose Civil powers are analogous to those of a Sudder Ameen; 1,158 before the Assistant Commissioner; and 182 before the Commissioner. The Moonsiffs decided 1,241 cases on merits, dismissed 136 on default and left 37 pending. The Tseetkays decided 2,071 cases on merits, dismissed 1,035 on default and left 140 pending. The Assistant Commissioners decreed for plaintiffs or appellants 724 cases, none for respondents or defendants, dismissed 155 on default and left 141 pending. The Commissioner decreed 94 cases for plaintiffs or appellants, none for defendants or respondents, dismissed 13 on default and left 50 pending.

The Moonsiff at Cachar out of 610 cases decided 267 on merits, dismissed 14 on default and left 118 pending. The Superintendent out of 61 cases, decided 22 for plaintiffs or appellants, 24 for defendants or respondents and left none pending.

In the Regulation Provinces the "total number of persons that came under the cognizance of the Criminal Courts of all descriptions in 1856 was 87,975. Of these, 2,450 had been pending from the previous year, 85,319 were apprehended during the year, and 215 were received by transfer.

They were disposed of as follows:—

Discharged without trial,	726
Acquitted,	25,389
Convicted,	55,384
Committed to the Sessions,	3,388
Otherwise disposed of,	500
Under trial on 31st December, 1856,	2,538

The sentences passed on them were:—

Discharged on security,	4,826
Dismissed from office,	2,279
Fined,	34,633
Flogged,	1,365
Imprisonment not exceeding one month, ...	9,453
„ above one and not exceeding six months,	1,099
„ above six months and not exceeding one year,	919
„ above one year and not exceeding two years,	277
„ above two years and not exceeding three years,	1,044
„ not exceeding three years,	277
„ above three years, but not exceeding seven years,	840
„ above seven years, but not exceeding fourteen years,	201
„ above fourteen years, but not exceeding sixteen years,	13

Sentence of death was passed on 38 persons; 261 were sentenced to transportation, and 12 to imprisonment for life.

The general average number of prisoners brought to trial in the year under review was 2,305 for each of the 37 zillahs composing the Regulation Provinces of Bengal. The largest number was in the 24-Pergunnahs and the smallest in Maldah. The average duration of cases referred to the Nizamut Adawlut was 198 days which shows a higher average duration than in the three preceding years, and is explained on the ground “that the interval between apprehension and commitment is frequently protracted by the citation of witnesses on behalf of the defendant before the Committing Officer, this privilege being allowed to all defendants, who often take a most improper advantage of it.”

The Non-regulation Provinces are treated of separately. In Assam during 1856, 4,869 persons were under trial before the Magistrates for criminal offences, of these 1,451 were acquitted, 3,247 were convicted, 109 committed to Sessions and 2 otherwise disposed of. The Sessions Judge who is Deputy Commissioner had 150 cases to dispose of. “Of the entire number, 47 were acquitted by him, 58 were convicted, 80 referred to the Sudder Court, thus leaving 15 cases pending on the 31st December 1856.

“The result of the 80 cases which were referred to the Sudder Court was:—

Death,	...	...	...	...	...	6
Transportation for life,	...	...	...	...	...	3
Imprisonment for 14 years,	...	...	...	...	...	11
" " 7 "	...	...	...	...	...	2
" " 5 "	...	...	...	...	...	1
" " less than 1 year,	...	...	...	...	...	1
Transportation,	...	...	...	...	...	5

"The remaining cases had not been disposed of at the end of the year."

In Arracan of 2,704 persons under trial before the Magistrates, 1,091 were acquitted, 1,531 convicted and 24 committed to the Sessions. The Sessions Judge disposed of 19 cases out of the 24 himself viz., 1 by discharge without trial, 6 by acquittal, and 12 by conviction. Three cases he referred to the Nizamut Adawlut.

In Chota Nagpore the out-turn of the proceedings in the Magistrate's Courts was 4,440 persons under trial, 1,469 acquitted, 2,701 convicted, 121 committed to Sessions and six otherwise disposed of. Of the 121 cases sent up to the Sessions Judge 3 were discharged without trial, 34 acquitted, 154 convicted and 18 referred to the Nizamut Adawlut. The cases referred to the Sudder were thus disposed of:—

" Death,	...	...	...	...	...	3
Transportation,	...	...	...	...	...	7
Imprisonment for 10 years,	...	...	...	...	...	1
" " 5 "	...	...	...	...	...	1

12

"The remaining six cases were pending at the close of the year."

In the Tenasserim Provinces the Magistrates, out of 4009 persons under trial, acquitted 1,406, convicted 2,505, committed to Sessions 46 and otherwise disposed of 40 cases.

"The 46 commitments to Sessions were disposed of by the Commissioner in his capacity of Judge as follows:—1 discharged without trial, 9 acquitted, 34 convicted, and 2 referred to the Sudder Nizamut, leaving 13 pending trial on the 31st December, 1856.

"In both the cases which were referred to the Sudder Nizamut, the prisoners were sentenced by that tribunal to death."

The Superintendent of Cachar acquitted 17, and convicted 272 of the 289 persons under trial during the year.

The Police returns are given in a new form and are assimilated to those of the Sudder Court. It is unnecessary to give the Police returns of each separate district, but to summarise the result.

In the Regulation Provinces there was a grand total of 92,716 offences committed, in which 1,24,120 persons were implicated,

but the total number of persons brought to trial was only 85,573, or scarcely sixty-nine per cent. of those implicated. Again, of the persons brought to trial only 57,957 were convicted or rather more than 46 per cent. of the criminals involved. The average for the five years preceding 1856 shows an annual total of 91,289 cases involving 1,98,989 persons. The cases of crime have thus increased, whilst the number of criminals has diminished.

Of offences against the person there occurred 31,712 cases implicating 32,233 persons. The average for five years preceding 1856 gives 31,048 cases involving 68,195 persons.

There occurred 1,174 offences against property committed with violence, implicating 11,002 persons. The average of the five preceding years gives 1,302 cases implicating 9,048 persons.

There were 35,858 cases of offences against property committed without violence, implicating 34,907 persons. The average of the five years preceding that under review gives 36,560 cases implicating 75,299 persons.

Seven hundred and twenty-eight malicious offences against property in which 2,607 persons were concerned, were reported. The average for five preceding years is 579 cases involving 1,810 persons.

Of offences against currency there were 78 cases and 151 offenders. The average is 78 cases and 170 offenders.

Of miscellaneous offences there occurred 23,166, in which 43,220 were implicated. The average gives 21,722 cases implicating 44,467 persons.

In the Non-Regulation Provinces there occurred during 1856, 3,851 offences against the person involving 6,005 persons; 147 offences against property committed with violence, involving 1,007 persons; 3,266 offences against property without violence, involving 4,253 persons; 264 malicious offences against property, involving 655 persons; 12 offences against the currency implicating 22 persons and 2,799 offences which do not come under any of the above heads implicating 4,232 persons. The grand total of crime during the year was thus 10,339 cases, in which 16,174 persons were implicated, the average for the past five years has been 8,547 cases involving 15,603 persons. Of the 16,174 persons supposed to be implicated, 12,620 were brought to trial and 7,831 convicted. The report details the criminal administration of each one of the Non-regulation Provinces, which are summarised as a whole.

Appended to the report is a return shewing the actual strength of the police force in Bengal up to 30th April, 1857. The appendix may be thus tabulated:—

Darogahs, Mohurrirs, Jemadars, Burkundazos.

Patna,...	...	77	79	94	1,203
Bhaugulpore,	...	38	45	59	688
Rajshahye, ...	...	73	83	77	994
Dacca, ...	...	65	82	83	966
Chittagong, ...	..	33	39	32	409
Nuddea, ...	...	87	91	179	1,726
Burdwan, ...	...	85	89	137	1,407
Cuttack, ...	...	21	20	46	479
Chota Nagpore,	...	17	26	20	292
Assam, ...	..	25	65	34	478
Arracan, ...	...	10	21	23	278
Darjeeling,	3	2	11	103
Cachar,	3	1	3	22
Cossiah Hills,	...	1	3	1	12

Total,...	538	646	799	-	9,057
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The report here contains the act for the appointment and maintenance of Police chowkedars in cities, towns, suburbs, stations, and bazars in the presidency of Bengal.

For the better protection of travellers and traffic on the Grand Trunk Road, "it was resolved by Government to extend the clearance of jungle on each side of the road from 50 to 200 yards, to increase and re-organise the road police force, to build additional Murhellas (station houses) along the road, and to ensure more vigilant and active supervision over the Police."

The Chief Engineer estimated the cost of clearing the jungle from the edges of the second division only of the Grand Trunk Road at Rs. 14,398-7-3.

In consequence of the Sonthal Insurrection of 1855 the Government of India determined to raise a second regiment of irregular cavalry in Bengal. The Lieutenant Governor of Bengal took the opportunity to suggest that a body of Military Police should be raised for the internal defence of Bengal. His suggestion was adopted and he was ordered to raise a force of one thousand sepoy and one hundred sowars. The monthly cost of the Military Police corps as thus constituted is Rs. 14,122-8.

The report here goes on to state what was done during the year under review for the suppression of dacoity. The following table exhibits the number of dacoities reported:—

DISTRICT.	1852.	1853.	1854.	1855.	1856.
24-Pergunnahs,	11	7	2	5	3
Baraset,	39	23	9	3	5
Howrah,	37	27	9	5	3
Hooghly,	128	93	59	33	41
Burdwan,... ..	65	50	47	27	12
Nuddea,	72	71	40	23	8
Jessorc,	33	43	44	68	62
Midnapore,	29	37	27	15	20
Total, ...	414	351	237	179	154

With regard to the increase of dacoity in the Hooghly district it is said that "the increase is principally in the Serampore and Jehanabad Sub-Divisions. In respect to Serampore, Mr. Ward observes:—"I hope to do something towards the suppression of dacoity in this Sub-Division; but though I wish to undertake the whole responsibility of any fluctuation in the crime, I am distressed to see how little the Police exert themselves, and how indifferent the Deputy Magistrate continues. I have known the Deputy Magistrate go out but on one occasion, and when, in another case, an inspection of house doors was necessary, he positively ordered the Police to send them into his Court, a distance of 28 miles as the crow flies. Without wishing to impute to their neglect and inefficiency any of the unsatisfactory results of the year, I must say that the Hooghly Police is by far the worst that we have to deal with.' An early opportunity will be taken of transferring the Deputy Magistrate of Serampore to another station, the duties of which will be more suited to his character.

"The general statement of dacoities committed in the whole of the Bengal districts exhibits a slight increase. The only districts (except those subject to the Dacoity Commissioner) in which any decrease of this crime is exhibited, are Bograh and Bancoorah. The districts of Pubna and Furreedpore have recently been added to Mr. Ward's jurisdiction at his request. In the concluding portion of his annual report, Mr. Ward makes the following observations on the inadequacy of term punishments to suppress dacoity:—

"But if practically dacoity is unpunished, and if the uncertainty of conviction is one of the great causes for the apparent increase, it is also sure that the inadequacy of the punishment awarded when conviction ensues has its ill effect. The experience of this and every other Criminal Court is, that imprisonment for a term does not check professional offenders. We know that men released one day have returned to their old pursuits

within a week, nay, on one or two occasions, the very day that they were set free, that it is the first duty of convicts on release to perform with all solemnity the *shrad* of their fellows who die in confinement, and that the necessary funds are procured by crime, and there is an instance of a man committing dacoity to get the wherewithal to deposit security demanded of him as a bad character !

“ ‘ For all this, it is still the exception to pass a higher sentence than seven years, that is, when the crime is a maximum the minimum punishment is given. Judges generally think an explanation necessary when a higher sentence issues. It is, I think, to be regretted that the new Penal Code leaves the punishment for dacoity as it was. I cannot but believe that if the law made it imperative on the Judge to pass a sentence of transportation for life, recommending to the mercy of Government or the Sudder Court cases deserving of leniency, the effect would be beneficial.’ ”

The report here proceeds to detail the proceedings of the Inspector of Jails in the Lower Provinces during 1856-57. Dr. Mouat visited and reported upon 17 jails during the year. The number of prisoners in custody on the 30th April, 1857, was 18,676 males and 566 females. The whole expenditure of the year amounted to Rs. 8,23,659-9-11½. The average cost of each prisoner was therefore Rs. 43-0-1½ as against Rs. 42-10-7.2 of the previous year. The increase was due to the high price of food. The most economical jails are those of Cuttack, Tirohot and Sylhet, whilst the most expensive are those of Sandoway, Ramree, Cossiah Hills and Akyah.

“ Doubts having been entertained of the capacity of the jails, and their ability to accommodate the number of prisoners confined in them, a very careful re-measurement of the whole was made by the Inspector's orders, and they were found to contain about 91,24,000 cubic feet of space, and to be capable of accommodating 18,248 prisoners, allowing 500 cubic feet of space to each. The number in custody on the 30th of April was 19,157, or nearly 1,000 more than there is room for without detriment to health. ‘ This calculation, however, does not,’ Dr. Mouat says, ‘ convey an accurate estimate of the real amount of crowding to which criminal prisoners are subjected. Few of the jails are even tolerably well ventilated, and from the system of classification adopted, the felon wards are, in nearly every prison, perilously over-tenanted. It is in this class that the greatest mortality occurs, and much of it is without doubt due to the unwholesome atmosphere they breathe. Natives of India do not bear crowding so well as people who are more vigorous and

robust, whose diet is more nutritious, and who are consequently better able to resist the ordinary influences of disease.

“The additional accommodation needed is for at least 3,000 individuals in ordinary times, and this is one of the reasons which points to the establishment of central penitentiaries as an urgent want in Bengal.”

The net profit realised during the year under review by the work of the convicts was Rs. 1,07,300.4 6½ or more than one-eighth of the whole cost of the jails. The “jails most distinguished for the profits resulting from manufactures were Hooghly, Alipore, and Jessore. In the first mentioned jail, each manufacturing convict earned Rupees 55-3-0-8, being considerably more than the cost of his maintenance.

“The greatest novelty of the year was the successful introduction of printing into the Alipore Jail. This branch of prison industry promises, ere long, to become the most profitable, and it unites in a greater degree than any other variety of convict labor, the essential conditions of pain and profit, with a fair chance of reformation.

“Inclusive of manufactures, the total value of the convict labor employed on roads, public works, and in the performance of the duties of jail servants amounted to Rupees 4,43,818.12-8½.

“In addition to this, Rupees 22,995-5-7 were levied by fines in commutation of labor, so that the gross financial results of the year represent more than half the entire cost incurred in the maintenance of the jails.”

The sickness and mortality of the past year were very high, from an average strength of 19,452.67 there died 1833, or, in the ratio of 9.423 per cent. Of the fatal cases 1,814 were males, and 19 females. Of these the Hindus numbered 1,228, Mussulmans 464, and other classes, chiefly Southals, 111. The mortality was greatest amongst those who had been agricultural laborers; and the prisoners employed on the roads died in greater proportion than any others. The reforms in jail management instituted by the Inspector are:—“The entire stoppage of tobacco; the introduction of task work; the gradual abolition of the costly and unsatisfactory system of feeding prisoners by contract; the shaving of the heads and trimming of the beards of heinous offenders; the addition of vegetable gardens to jails; the regulation of convict ships, and of the transit of prisoners from one jail to another; the revival of transportation to Arracan, with rules for the management of prisoners in Ramree as a convict settlement, and the drainage and ventilation of such of the jail buildings as admit of improvements in these respects are the chief results of the past year.”

As stated last year the revenue in the permanently set-

tled districts of the Regulation Provinces in Bengal is realised with ease. During the past year only 606 estates were sold for arrears of revenue. The aggregate sudder jummah of these mehals was Rs. 78,508, the aggregate balance for which they were sold was 26,356 and the aggregate sum realised by their sale was Rs. 5,60,676.

The following table exhibits the total demands, collections and remissions of land revenue for 1856-57:—

	Demands.	Collection	Remission	Balances.
	Rs.	Rs.	Rs.	Rs.
In the permanently-settled districts of Bengal and Behar,	3,59,93,177	3,33,75,696	1,06,085	25,11,391
In Orissa,	22,66,306	17,06,142	20,411	5,39,755
„ Assam,	10,15,746	8,62,743	1,402	1,51,603
„ Chota Nagpore,	3,85,429	3,36,752	1,252	47,427
„ Arracan,	7,68,858	6,47,212	683	1,20,934
„ Cachar,	88,599	88,193	0	401
„ Darjeeling and Cossiali Hills,	36,205	35,547	83	573
„ Tenasserim Provinces,	2,72,885	2,72,138	663	83
Total, Rs.	4,08,27,205	3,73,24,458	1,30,579	33,72,167

It will thus be seen that the revenue demand from the permanently settled districts of the Regulation Provinces constituted in 1856-57, 88.7 per cent. of the entire demand, if we exclude the Tenasserim Provinces now under the Supreme Government.

The net revenue from the customs was in 1856-57 Rs. 1,40,97,590 to Rs. 1,37,59,218 the net revenue of the preceding year.

The returns of the import and export trade as compared with the previous year are equally favourable. In 1856-57, the imports including Rs. 8,02,41,782, worth of treasure amounted to Rs. 14,70,02,315, and the exports to Rs. 14,66,37,449 including treasure to the amount of Rs. 99,89,531. The imports and exports of the previous year were respectively Rs. 13,87,08,627 and Rs. 13,75,20,947. The ships which arrived amounted to 1,011 with an aggregate tonnage of 5,72,127 tons; and the departures were 1,113 with a tonnage of 6,66,416. In 1855-56 the arrivals were 1,212 with a tonnage of 6,58,373 and the departures were 1,201 with a tonnage of 6,49,019.

The receipts, charges and net revenue of the opium department may be thus exhibited:—

	1855-56.	1856-57.
' Receipts,	4,17,44,360	3,82,95,779
Charges,	1,25,83,819	1,12,68,183

Net Revenue, 2,92,10,541 2,70,27,646"

So far back as 1810 the question as to the expediency of placing restrictions on the opium cultivation of Assam was carefully considered by Government. It was then decided that any interference would be undesirable. Thus the matter rested till 1851, when the civil officers of Assam again brought the question forward, and on the 13th June, 1856, the Lieutenant Governor recorded his views in a minute. The minute is contained in the report, and decides that "it is inexpedient to interfere with the opium cultivation of Assam."

"The bill for remodelling the laws which regulate the cultivation and manufacture of opium, referred to in the last report, has since been passed as Act XIII. of 1857."

The abkarry demand in the Lower Provinces for 1856-57 was Rs. 28,81,949, and the collections were for spirits and drugs Rs. 28,45,075 and for opium Rs. 9,40,891. The charges in the collection amounted to Rs. 6,40,073. "The Bill for the consolidation of the abkarry laws referred to in the last report has since been passed into Law. (*Vide* Act XXI. of 1856.)

The net revenue from the salt department is shewn in the following comparative statement:—

Receipts.		Disbursements.		Net Revenue.	
Rs.	As. P.	Rs.	As. P.	Rs.	As. P.
1855-56,	1,09,35,916 12 3½	38,53,620 12 5½		70,82,295 15 10	
1856-57,	1,07,02,593 6 8½	39,99,504 0 4		67,03,089 6 4½	

The proposed experiment of importing salt from Sind has not yet been carried out. The re-opening of the 24-Pergunnah's salt agency has proved an absolute failure. "The manufacturing season of 1856-57" stated to have been one of the most favorable ever known, so that it is impossible to ascribe the failure in the slightest degree to the weather. The Board of Revenue are of opinion that it is to be ascribed partly to the circumstance that the manufacturers were so late in making their arrangements for clearing, &c., in consequence of the pertinacious refusal of the latter to receive advances except at an increased rate, and partly also to the lax supervision exercised over his subordinates by the late Salt Agent of the Twenty-four Pergunnahs, Mr. F. Lushington, and to his want of activity and energy in neglect-

ing to visit the places of manufacture." It is therefore in contemplation to reclose the agency.

The operations of the stamp department are thus exhibited :—

	Bengal Provinces.	Calcutta (Town.)	Total.
1855-56.			
Gross Receipts,	21,39,637	99,878	22,39,515
Charges,	1,20,910	92,033	2,12,943
Net Revenue,	20,18,727	7,845	20,26,572
1856-57.			
Gross Receipts,	23,19,591	1,41,639	24,64,230
Charges,	1,31,176	16,033	1,77,209
Net Revenue,	21,88,415	98,606	22,87,021

The most important measure connected with the administration of the land revenue department of the Bengal Presidency during the year under review, is the introduction into the Legislative Council by Mr. Grant, of a bill to improve the law relating to "sales of land for arrears of revenue." The report describes the principal alterations contemplated by the bill.

The supply of specie to the public from the mofussil treasuries engaged in 1852, the attention of Lord Dalhousie. The Government accountant was addressed on the subject, and it was suggested to him that funds might be transferred from those treasuries where they were not wanted by bills granted on those treasuries where the public required such funds. The result is extremely satisfactory, the amount drawn in bills being three times greater in 1856, than it was in 1851, and the amount remitted in specie being little more than one-half. The report contains notice of the tullubannah system, the discontinuance of money payments to the temple of Juggernaut, and a narrative of the most important events connected with the educational department in 1856.

The Master Attendant's department underwent certain changes in 1856-57. On the 30th April, 1856, there were 150 members in the Pilot service. It was considered advisable to devise some plan for meeting the increasing demand for Pilots, and with this object in view, "it was resolved to encourage the more active and efficient Pilots by allowing them to exchange their fixed salary for the profits of their own earnings, and two-thirds of the pilotage of each ship for which they were engaged, their position in the Pilot service remaining in other respects unaltered. It was also determined to pass for the grade of Master Pilot, such Mate Pilots as might be proved to be competent to perform the duties of Master Pilots, and that those Mates who might be so passed should be treated in all respects as if

they were Masters; but instead of being allowed to draw the pay of Masters, they were to continue to receive the pay of Mates, and be remunerated for the higher duties which they might perform in their new rank, by receiving a proportion (three tenths) of the pilotage charge of every vessel they piloted of greater burthen than 400 tons. The same principle was applied to the cases of a certain number (not exceeding ten) of 2nd Mate Pilots, who about this time were appointed Mates, with a view to their employment as Running Pilots."

The number of vessels which grounded in the river during 1856-57 was 112, and the number of collisions was 35. There are eight pilot vessels, one river-surveying vessel, one buoy vessel and five anchor boats. The pilotage receipts for 1856-57 were Rs. 6,38,051 and the estimated expenditure was Rs. 5,45,000.

In the Harbour Master's department there are 25 assistants and 121 moorings. The receipts of this department were in 1856-57 Rs. 2,63,851, exhibiting a slight increase over the receipts of the previous year.

The report mentions what has been done with regard to steam communication with Assam, and details the reasons for the establishment of a town and port on the river Mutlah.

In the Public Works department the total expenditure during 1856-57 was Rs. 16,60,811.

The expenditure may be thus classified :—

Military,	Rs. 6,52,396	Ecclesiastical,	Rs. 23,480
Revenue,	1,74,977	General,	85,478
Educational,	10,694	Agricultural,	95,327
Marine,	12,815	Communi-	
Judicial,	99,167	cations,	16,60,841

The report here contains a notice of the Calcutta canals, remarks on the sanitary condition of Chittagong, on the difficulties in the way of the examination of uncovenanted servants, shews the importance of quarterly returns of business, notices the want of accommodation and furniture in the court of the Moon-siffs and states the operations of the survey department.

The political state of the tributary meahs of Cuttack throughout 1856-57 was on the whole good. They were in the enjoyment of the most profound tranquillity and the Rajahs and people appeared satisfied with our rule.

On the 1st January, 1856, the Raj of Nungklow, a semi-independent district in the Cossyah Hills, became vacant by the death of the late Jeedur Sing and the Raj was resumed by the Governor.

The report notices little else worthy of interest, it gives the number of emigrants for the port of Calcutta to the Mauritius

and West Indies namely 7,242, the number of coolies which returned during the year under review was 3,373, remarks on the Hindu festival Churruk Poojah and concludes by naming the most important Acts passed by the Legislative Council during the official year under review, which have general or special reference to the Government of Bengal.

THE INDIAN ADMINISTRATION

For 1856-57.

THIS is a collection of reports from every province in India which is now published annually. The present number has been delayed more than a twelvemonth by the mutinies in the army. It commences with a collection of papers on European colonization which have been already summarized.

INDIA GENERAL.

Public Works Department.—On 17th June, 1856 a general order was issued reorganizing the Department of Public Works on the basis of promotion by merit instead of by seniority. "Under the above scheme, all the officers and subordinates of the Public Works Department in the Presidency of Bengal, and in the territories administered by the Government of India, are ranged in regular gradation, according to a fixed scale, ascending by connected steps, from the Sub-Overseers and Sub-Surveyors at the bottom of the list to the Chief Engineer at the top. The previous classification has been simplified, many superfluous designations have been abolished, the mutual relations and separate duties, and the remuneration of the members of the several classes, have been defined, and travelling and other contingent allowances have been determined, according to an easily intelligible principle." The Chief Engineers are divided into three classes with Rs. 2500, 1000 and 800 a month in addition to military pay. Executive Engineers "are divided into four classes, with monthly departmental salaries (for military officers) of Rupees 600, 500, 400, and 300 per mensem respectively." General classification lists of officers have been prepared, new rules laid down for account, certain transfers of jurisdiction have been effected and the million sterling allotted for Public Works by the Court of Directors was distributed to Bengal, 12 lakhs; to Madras, 22 lakhs; to Bombay, 14 lakhs; to the North-West Provinces, 15 lakhs; to the Punjab, 21 lakhs; to Oude, 5 lakhs; to Pegu, 4 lakhs; to Tenasserim, $\frac{1}{2}$ a lakh; to Hyderabad, 3 lakhs; to Nag-

pore, 2½ lakhs; and to the Straits Settlements ½ of a lakh. The whole of these sums are to be expended on new works of public improvement.

It has been determined to make a complete system of roads consisting of imperial roads like the Grand Trunk, one of which shall pass through every district, and small or district roads. The former will be constructed from State and the latter from local funds. On these roads tolls were sanctioned. All toll and ferry receipts on lines built and maintained by the State are to be carried to credit of the general revenue, while those on roads or ferries built and maintained at local expense will be carried to the credit of local funds. A good metalled road has been sanctioned between Calcutta and Darjeeling, the cost being assumed at Rs. 21,00,000, and the road from Calcutta to Jessore has been generally approved by the Honorable Court. Orders have been issued to improve the Aeng road, and a road from Pongday to Prome has been sanctioned. Roads from Calcutta to Budge-Budge, and from Jeeagunge near Moorshedabad to the nearest Railway station have been sanctioned. "Bridges over the Booreca, Morhur, and Bootana rivers are in progress." Part of the Agra and Bombay road between Agra and the Chumbul will be bridged and metalled, and "in the Punjab, both in the hilly and plain districts, the attention of the Supreme Government has been given to various roads of commercial or political importance, such as the Abbottabad and Gurree Hube-boolla road, and the Abbottabad and Kala Serai road, in the Huzara district; the road from Peshawur to Kohat in the Khut-tuck country; the Kussowlie and Buddee Hill road; a branch line of road to connect Dugshai with the Hindostan and Thibet road, and roads between the plains and the sanatoria of Dugshai, Subathoo, and Kussowlie." A Government bullock train has been sanctioned for the Hindostan and Thibet road. An outlay of Rs. 7,41,172 was allowed to complete the Grand Trunk road to Lahore, and four lakhs for the road from Lahore to Peshawur. A floating bridge was sanctioned for the Jhelum at Raepore, and a new road has been ordered to run from Bellary to Hullikerry in Dharwar to the sea at Sudasheoghur, Tudda, and Compta. This road connects the cotton lands of Dharwar with the sea.

The financial result of the Ganges canal for the year is Rs. 52,650, and net revenue of Rs. 22,739-7-9.

The bankments of Dehra Ghazee Khan swept away by a rise of the Indus are to be repaired, and an anicut over the Tamrapoerney, and a high level channel from the Kistnah anicut, and channels from the Poiney anicut have been sanctioned.

Measures are in preparation for a new General Post office and Electric Telegraph office in Calcutta, for protecting Rampore Beaulah from the river, for forming a park and gardens at Rangoon, and for building a new masonry jail at Akyab. "A very carefully considered project for supplying the Roorkee foundry with pig iron from smelting furnaces to be established at Kunkhul, and fed with the iron ores of Kotdwara, has been sanctioned by the Supreme Government as an experimental measure. The ultimate object contemplated is to turn the rich iron resources of the Sub-Himalayan tracts of Gurhwal to immediate useful account." The furnace and machinery will be able to turn out 50 maunds of pig iron a day, at Rs. 2-5-8 per maund, a saving of 36 per cent. on the English price.

The expenditure on military buildings has been considerable. The total outlay on works previously sanctioned has been, military, Rs. 43,89,540; public, Rs. 51,39,823; judicial, Rs. 3,95,589; ecclesiastical, Rs. 75,006; educational, Rs. 23,632; revenue, Rs. 6,15,969; revenue-irrigation, Rs. 55,88,905; marine, Rs. 2,03,462; political, Rs. 2,608.

In Railway matters certain improvements of detail have been made, in the East India Railway, particularly, a large addition to the Howrah terminus and the profits of the open section of 121 miles "for the half-year ending 30th June, 1856, as compared with that of the previous half-year ending 31st December, 1855, may be looked upon as very satisfactory, the gross revenue being, Rs. 5,10,128 and the percentage of surplus to gross revenue 59½ last year the gross revenue was Rs. 3,86,367 and the percentage of surplus 58½. This is equal to a net revenue of 4 per cent. on a million and a half, the estimated cost of the experimental line including buildings and rolling stock. The working expenses have been steadily reduced, the traffic charges in particular having been brought down from 27 per cent. in 1855 to ten per cent. in 1856. "A decision has been come to, by the Consulting Engineers of all the Indian Railway Companies in England, who met together for the purpose, by which uniformity in the dimensions of certain parts of the rolling stock and roadway in all Indian Railways will be established, whereby the fullest advantages of a uniform gauge of Rails will be secured." The project for a Railroad from Calcutta to the Mutlah was reported on as not of immediate necessity, while a strong recommendation has been sent home of a line from Calcutta to Dacca. The Home Government were also informed that the plan proposed by the Great Northern and Eastern Railway of Bengal for constructing a line from Calcutta to Rangamutty with a branch to Dinagapore would merely create a line competing with the Calcutta and Eastern Railway. "The Sindh Railway Company

were authorized to make surveys from Hyderabad towards Lahore, in view to establishing improved means of transit along the valley of the Indus between Kurrachee and Lahore." The preliminary surveys between Umritsur and Mooltan have been completed. "The first section of the Madras Railway (65½ miles) was opened for traffic on the 1st July, 1856. The line has recently been extended to a length of 81 miles. The traffic on this length now amounts to about Rupees 6,000 per week." The direct route to Bellary via Cuddapah has been selected for the Madras Railway. "The extension towards the north-east of the Great Indian Peninsula Railway, from Julgaon to Jubulpore, has been authorized, in view to its continuation to, or near to Mirzapore, by the East Indian Railway Company. The proposal to construct a branch line of the Great Indian Peninsula Railway by Oomrawuttee to Nagpore has also been approved by the Home Authorities. The line of Railway, as far as Walsindree, on the Thull Ghaut road, has been completed and opened to traffic." No passenger has been killed on any of the three Railways. Fourteen other persons have been killed by their own fault or negligence. Some accidents unattended with loss of life have occurred but they have all been trifling.

A paper is added on iron and coal fields in Bengal which has been previously analysed.

In the financial department the accounts of Bengal have been separated from those of India, the accounts of the stud department have been reorganized, and alterations proposed in the pay department of the army. The despatch of accounts to the Honourable Court has been accelerated, but the offices have been directed to accelerate them still further by "sketch estimate, 1st September in each year, regular estimate, 15th January in each year, statements of actuals, 15th December following the year to which they appertain, comparative statement for the preparation of the financial review, 15th February in each year." Quarterly and annual statements of revenue and expenditure are also to be published, and an account of the cash balances. The audit and correspondence departments of the Marine office have been reorganized and strengthened, and a special officer has been ordered to examine the systems of account in the Public Works Department of each Presidency. Separate audit and account offices were organized for the Punjab, and "by Government Notification, dated the 30th of August, 1856, a three and a half per cent. loan, opened on the 28th October, 1853, was closed, Rupees 10,79,400 being the total amount subscribed to it, and a four and a half per cent. loan, guaranteed for ten years, was opened. The above loan was

closed on the 16th January, 1857, after realizing Rs. 39,26,800, inclusive of twenty-nine lakhs subscribed by *transfer* from the balance of open accounts of the Civil and Military funds at Madras; and a new Five per cent. loan was opened, to the extent of three crores of Rupees, no part of this loan being payable before the 16th of January, 1872." The Calcutta mint received merchant's bullion.

" Gold,...	...	Rs. 11,80,666	worth during 1856-57.
Silver,	...	„ 5,47,82,573	„ „

Total, Rs. 5,59,63,239

Average, Rs. 46,63,603^a/₁₂ per mensem.

The amount coined was gold pieces, Rs. 84,290; rupees, Rs. 6,48,57,678; half rupees, Rs. 15,19,700; quarter rupees, Rs. 31,15,229; two anna pieces, Rs. 41,15,776; pice, Rs. 2,23,88,926; half pice, Rs. 2,83,88,926; pie pieces, Rs. 6,53,798; making a total of Rs. 12,51,24,323.

The copper coinage, however, has met with serious interruption from the over-plus of silver work. The Court have accordingly sent out 350 tons of copper blanks. The rupee coinage is to be withdrawn from the Straits, and the dollar substituted if the Court consent.

The Bank of Bengal declared a dividend of 6½ per cent. for the six months ending 31st December, 1856, and of 11 per cent. for the six months ending 30th June, 1857. The report here contains the Acts passed during the year under review.

ADMINISTRATION OF MADRAS

For 1856-57.

Civil Justice.—"The several officers vested with judicial powers had before them upwards of 1,90,000 actions for civil injuries, the value of the claims in which amounted to Rupees 9,75,00,000, or nearly £1,000,000 sterling. The number of *causes decided on their merits* slightly exceeded 53,000, of which, in upwards of 44,000, judgment was given for the plaintiff." The decrees passed in 41,000 cases were executed; execution has been rendered much more easy by enforcing them against the person instead of the property of defendants. The attachment of the person takes away the temptation to evasion.

Criminal Justice.—"The number of criminal charges which came under investigation exceeded 97,000, and the number of

persons apprehended upon them was rather more than 2,23,000. Of these, only 25 per cent. were convicted and punished." The number of persons sentenced for heavy offences was less than 1,100. "About 10,000 cases were reported, in which the offenders were either not known or escaped apprehension." One-half the offences were against the person. Thirty-two males and two females were hanged.

Police.—The Police requires a better organization.

Prisons.—But little has been done to improve discipline. The allowance of space to each prisoner has been increased and estimates have been called for a central prison near Madras, and two new prisons at Madura and Calicut where the existing structures are unhealthy.

Revenue.—The season was not favourable on the whole, but prices were high, and the cultivation increased by 10,87,000 acres or ten per cent., the cultivated average of the previous year 1855-56 having been 1,09,67,912 acres. The increase is owing chiefly to remissions of revenue, and the promise not to tax improvements made by the tenantry. The total revenue levied during the year was Rs. 4,88,00,934, of which the land revenue amounted to Rs. 3,75,09,713, the abkarry to Rs. 23,12,853, the salt to Rs. 54,04,795, the sea customs to Rs. 13,09,646, the moturpha to Rs. 10,82,974, the stamp revenue to Rs. 7,06,716, frontier duties to Rs. 1,95,319, and the sevoy jumma to Rs. 2,09,805. In 1855-56 the total revenue was Rs. 4,68,34,808.

In customs the most striking fact is the import of specie which has risen to Rs. 17,03,259, the exports being only 3,33,831. In Malabar the export of coffee has increased in ten years to 23,656 cwt. The exports of indigo, sugar, hides, rice, and seeds are also increasing and were:—

1856-57.

1. Indigo,	...	...	...	Rs. 43,57,109
2. Sugar,	...	...	...	25,20,769
3. Hides and Skins,	...	...	...	12,97,819
4. Rice,	...	...	...	4,29,141
5. Oil-seeds,	...	...	...	2,37,358
6. Coffee,	...	...	...	1,19,587
7. Oil,	...	...	...	1,11,859"

The average of taxation taking the population at 22½ millions is Rs. 2-2-3½ head. The average assessment on the land is a trifle over Rs. 3 an acre. The report proceeds to state the effect of the reduction of the land tax. It has been every where beneficial. The assessment of South Arcot came under revision in Fnsly 1264—A. D. 1854-55, and the reductions amount to Rupees 9,63,723, or £ 96,372, per annum. Notwithstanding

this large remission, the revenue of the current year slightly exceeds that of the highest year on record. Moreover, a further sum of Rupees 34,000 has been collected from the land, on account of the road fund. The Collector reports, that the demand for fresh land, since the reduction of assessment, and especially where that reduction was most liberal, has been very great; that 'the relief has given a decided impetus to industry;' that 'the condition of the people has been indisputably improved, as may be seen by the substantial houses they are building in every direction, and by the independent manner in which they deport themselves;' that labour is in demand, and emigration to Bourbon has ceased." District Gazettes have been issued in two zillahs to give the people information, and have been found acceptable. They will therefore be issued from all other Collectorates.

The preliminary arrangements for a survey of Madras are under consideration. Every district will hereafter have a local road fund, but as yet such funds have only been established in South Arcot, Salem, and Malabar.

The Executive of Public Works has been transferred from the Revenue to the Engineer department and the following sums were proposed in the budget for 1856-57 :—

	List No. 1.	List No. 2.	Repairs.	TOTAL.
	Rupees.	Rupees.	Rupees.	Rupees.
Irrigation Works, ...	4,84,820	10,74,173	11,25,630	26,84,623
Communications, ...	14,73,185	20,30,400	5,33,845	40,37,430
Buildings, ...	7,35,572	6,02,641	1,94,995	15,33,208
Total, ...	26,93,577	37,07,214	18,54,470	82,55,261

On 3rd May all works not already commenced were stopped, and though detailed restrictions were removed on 17th October, 1856, the expenditure of the year on irrigation and communication was limited to twenty-two lakhs. The total expenditure during 1856-57 on new works and repairs amounted to Rs. 52,42,440.

The report describes in detail the Public Works undertaken and improved. In the Railway department the work actually performed was :—

Earth-work, ...	C. yards	63,44,655
Masonry, ...	"	60,498
Permanent way, ...	L. yards	52,551
Ballasting, ...	C. yards	4,22,551
Fencing, {	Temporary, L. yards	17,688
	Permanent, "	3,38,019

This was all on the Railway from Madras to Bypore, the first 65½ miles of which were opened on 1st July.

In the Marine department the measures adopted have been "the introduction of the Harbour Conservancy Act (XXII. of 1855) at all the ports of sufficient importance, to warrant the expense of supervision; the introduction of Act I. of 1857, for controlling the conveyance of native emigrants from India to Ceylon, the Straits, the Tenasserim Coast, and Burmah; and restricting the emigration to such ports as have the necessary means of controlling it; the improvement of the beacon lights along the Coast; and the prosecution of the survey of the Malabar Coast, its harbours, ports and rivers." During the year a steamer belonging to the Indian Navy called the *Coromandel* was placed at the disposal of the Madras Government. She with the *Zenobia* has been employed in the conveyance of troops. Transport for 18,250 men was however required during the year, and Government were compelled to hire sometimes at high rates. "The Madras forces stationed across seas now amount (including followers for whom transport has to be furnished) to upwards of 26,000 souls, besides those belonging to the Ordnance, Commissariat, and Miscellaneous departments. The average annual numbers to be moved outward will be 10,000, and homeward 8,000." The report contains a short notice of each port in the Presidency and the improvements effected, usually slight. In Madras itself sanction has been obtained for the construction of a pier, but a ship breakwater is greatly required.

The report contains a statement exhibiting the financial position of the Presidency, from which it appears that whereas the revenue is estimated at Rs. 5,45,92,000, the expenditure is Rs. 6,03,72,000; there is thus an expected deficit of Rs. 57,80,000. In the military department the charges are the heaviest and are estimated at 57 per cent. of the whole income.

During the past ten years a sum of Rs. 6,22,46,385 has been charged against the Madras provinces for troops employed in defending provinces not belonging to the Presidency. According to tables compiled for the ten years there has always been in the Madras treasuries a sum sufficient for six months' expenditure. At the close of the year under review there was a balance sufficient to meet six months' expenditure. The amount of revenue drawn to the Presidency by bills is $23\frac{1}{2}$ per cent. of the whole; further $25\frac{1}{4}$ per cent. has been drawn to the Presidency in specie.

The mint has received from private sources Rs. 79,89,933, and has struck thirty millions of coins. The net gain of the year has been Rs. 1,02,102, though the number of small coins manufactured has been unusually large.

The dispensaries of Madras have cost Rs. 70,153 during the

year, European medicine is increasingly popular. In jails the ratio has been of sick to strength 128, deaths to strength 5·3 per cent. During the year 3,74,923 persons were vaccinated, and 3,41,054 of the operations succeeded. The cost of the vaccine department was Rs. 30,765. During the year the average deaths among the European troops amounted to 2·9 per cent. on strength. The highest average was at the Presidency or 8·6, the lowest in the ceded districts or 1·1.

The progress of public instruction is slow but satisfactory. The examinations of the Presidency College are on the whole favourable to the proficiency of the students. There are 262 students in the general branch. The four provincial schools to be raised ultimately to colleges are improving and shew 755 students. Five of the eight zillah schools sanctioned have been established, and 28 of the 100 talook schools. Grants-in-aid have been made to 21 private schools to the amount of Rs. 30,000 and applications have been received to the amount of Rs. 65,000 per annum. There are thirty-three Anglo-Vernacular schools either belonging to Government or under inspection with an aggregate attendance of 5941. In the least advanced of these schools sound education in arithmetic, algebra, geometry, geography and history is imparted, chiefly in English. Only three districts are without schools of this grade. The talook schools have an average of 38 pupils but there is a good deal of apathy among the population with regard to vernacular instruction. The total number of schools in the Presidency is 459 and the number of pupils 13,373.

In Tamil, the series of school books required is nearly complete. Twenty students are under training for masters in the Normal school. The progress attained is very considerable, but there is great difficulty in inducing lads to enter this school. The weekly vernacular newspaper now published under Government auspices, has a circulation of 1,000 copies, and is widely read.

The head-quarters of the Government photographic establishment have been fixed at Bangalore.

In the Telegraph department the old line from Madras to Bombay has been repaired, and the bamboo posts replaced by posts of granite, and a new line opened from Mysore to Calicut *via* Mercara and Cananore. "During the past year, the private and public messages transmitted amounted to 15,782, and in these 52 errors occurred. The cash actually received, added to the *pro-forma* charge of service messages, makes a total of Rupees 45,849-1-0. Statement No. 5 shows that the expense of working the department for the past year has been Rs. 51,091-15-11, and the Telegraph in Madras has not, therefore, brought any revenue to Government; but it has done much more than was

expected. It has very nearly paid its own expenses, and its valuable services in the year under report, during the Kimeedy rebellion, the Persian war, and the disturbances in the North-West, have entailed an expense of only Rupees 5,243-14-11, or Rupees 437 a month."

The appendices contain detailed accounts, principally statistical of the facts summarized above.

ADMINISTRATION OF BOMBAY

For 1856-57.

Civil Courts.—In Bombay there were 1,51,822 original suits for adjudication during the year and 12,871 appeal suits. Of these 80,039 and 2,915 respectively were decided on merits and 38,122 and 4,571 left in arrears. In the original suits there was thus an increase of 5,182 arrear cases over the returns of 1855, which however was only proportionate to the increased amount of litigation.

In Sind the returns are:—

COURTS.	Filed.	Decided.
"Deputy Magistrate's,	889	652
Kardar's,	5,139	4,518
Moonsiff's,	3,528	3,444
Total, ...	9,556	8,614"

The average amount of sums in litigation is Rs. 47. The cost to suitors is 5 per cent. on the claim. In 1856, the Small Cause Court of Bombay decided claims involving Rs. 6,54,388 or nearly a lakh more than the aggregate in the previous year.

Criminal Justice.—The following table exhibits the general results:—

CONVICTED AND
SENTENCED TO

	Offenders apprehended and brought to trial.	Flogging, Fines, &c.	Imprisonment.	Transportation.	Death.	Total.	Acquitted.	Found Insan.	Died before trial.	Total.	Grand Total.
1855, ...	58,677	33,203	8,045	63	19	41,330	17,341	3	3	17,347	58,677
1856, ...	56,967	32,192	7,596	45	27	39,860	17,106	1	0	17,107	56,967
<hr/>											
Decrease,	1,710	1,011	449	18	0	1,470	235	2	3	240	1,710

Nearly 70 per cent. of offenders were convicted and punished. There were 27 instances of capital punishment or 9 more than the average of the three preceding years.

In Sind.—13,318 crimes were committed, or 1 to every 129 of the population, but only 3,758 called for the attention of Magistrates or Deputy Magistrates. "In the cases which came before the Magistrates and Deputy Magistrates, convictions were recorded in 3,287, and acquittals in 471 instances. In only 101 cases of the 3,287 convictions, was a sentence passed exceeding one year's imprisonment." Crime is decreasing, and the 29 cases of murder arose entirely out of quarrels about women.

In Police.—The Police corps have been made more efficient, their arms and discipline improved, and the re-organization of the village Police has been carried on with diligence. The great diminution of gang robberies shews the effect of these measures. In eight years they have decreased from 1,067 to 36.

In the jails the percentage of mortality has been reduced from 4.5 to 3.433. The standard of labour has been increased to nine hours, and made real. In-door labour only is allowed, and education confined to teaching those things which will enable the convict to gain a knowledge of common things.

The land and sayer revenue for the year has been Rs. 1,89,73,076-2-1. The land revenue Rs. 1,74,14,453 shews an increase of Rs. 9,00,626. A single officer has been appointed to enquire into alienated lands, with "powers enabling him to command the co-operation of revenue officers, and to pronounce authoritatively on all matters connected with alienated revenues not involving judicial decisions on the validity of titles adjudicated by

the civil tribunals, or Enam Commission." There has been great difficulty in prosecuting enquiries in Guzerat owing to the destruction and removal of papers, but "the number of claims recorded in the Southern Division of the Enam Commission up to 30th April, 1857, is 37,500, and that in the Northern Division 8,231, making a total of 46,031, claims. The number remaining to be recorded on the 30th April, 1857, aggregates in both the Divisions 31,259, of which the greater part, *viz.*, 24,222, is in the Northern Division. The number of claims decided in the two Divisions during the year 1856-57, amounts to Rupees 1,162, and their value to Rupees 1,31,179, of which Rupees 20,823 have lapsed to Government. The expenditure of the Commission has amounted to Rupees 1,16,399." The Government propose to strengthen the laws for the recovery of revenue records.

The trade of Bombay has increased by $5\frac{1}{2}$ crores being,

Imports.

Exports.

Merchandize, Rs.	7,53,35,111	Merchandize, Rs.	10,98,27,886
Horses, .. "	9,61,000	Horses, ... "	2,200
Treasure, ... "	8,21,83,615	Treasure, ... "	1,58,89,731

Rupees, ... 15,87,80,026

Rupees, . 12,57,18,817

The customs revenue from this trade is Rs. 36,16,213 shewing an increase of Rs. 2,09,811. There has however been a falling off in the salt excise to the same amount. The tonnage included 7,431 vessels with an aggregate of 7,00,154 tons. Of the 514 square-rigged vessels 377 were British. "The receipts from opium passes amounted, during the year, to Rs. 1,15,65,400, being Rs. 15,00,000 in excess of the preceding year's revenue."

In Sind the customs duties amount to Rs. 1,00,143 and the trade has been rising steadily for twelve years. In 1843-44 the total trade was Rs. 12,21,600 whilst in the year under review it was Rs. 1,42,01,879. In the item of wool alone there is an increase of eight lakhs of Rupees. Oil-seeds and indigo have apparently but not really fallen off, and the export of saltpetre increases. No general sketch of the revenue or finance of the Bombay Presidency is published either in the body of the report or its appendices.

In education nothing new appears to have occurred, but the training and discipline of Poona College has been condemned, and thirty vernacular schools have been opened in the Presidency Division, and the Jamsetjee Industrial school. Forty-nine pupils have been admitted into the latter. Forty-five more vernacular schools have sprung up in the Guzerat Division and

38 in that of the Deccan. The want of qualified masters has been greatly felt and in Ahmedabad this has been met by the establishment of a Normal school.

In Sind an Engineering school has been opened at Kurrachee attended by 20 pupils. The Government English schools are well attended, but the vernacular schools are more popular, though all children still learn Persian as the first requisite of education.

	V. Schools.				Pupils.
Kurrachee,	8	...	...	...	...
Hydrabad,	14	...	...	...	737
Shikarpoor,	11	...	...	...	490

This account is independent of private schools of which there are 224 in the Shikarpoor Collectorate alone, attended by 3,495 scholars.

In Public Works the great drawback has been the absence of scientific agency, several Engineer officers having been withdrawn for service in Persia. The actual expenditure for the year was Rs. 40,09,753. In the Railway department 37½ miles have been opened making 89 miles in all. The works generally are advancing. On the Bombay, Baroda and Central India Railway the earth-work commenced on 1st May, 1856, and advances rapidly. The construction of the iron bridges is however a serious undertaking, and the line will hardly be open in any portion before the end of next year.

No financial statement can be given, but the cost of the civil establishment has increased by Rs. 84,081, and in the Military department by Rs 5,78,238. This is caused by the increase of the army.

In the Marine department, the *Coromandel* a vessel of 1,000 tons with engines of 250 horse power, and the *Lady Canning* of 510 tons with engines of 160 horse power have been added to the Indian Navy. Six sea-going steam gun-boats are also to be constructed, and others for the Upper Indus. Four river vessels and four flats have been added to the Indus flotilla.

In the Political department, there were few incidents of any importance.

In the Military department, all the strength of the Presidency has been concentrated on the Persian war. The force despatched for the expedition to occupy Karrack and Bushire was to consist of "one troop of horse artillery, two horsed batteries of European foot artillery, reserve artillery, with four heavy guns and two 8 inch mortars, two companies of sappers, two squadrons of native light cavalry, two troops of irregular cavalry, two regiments of European infantry, four regiments of

native infantry." On 9th November the final instructions were received from the Government of India, and on the 13th the fleet numbering 14 steamers, 32 sailing transports, a sloop and a brig proceeded to sea. On 4th December the expedition arrived off Bushire, and occupied the island of Karrack without opposition. On 6th December, General Stalker landed his troops, and on the 9th, captured the Bushire Redoubt. On the 10th, Bushire was surrendered.

Soon after the first expedition had been sent, orders were received to increase the force, and accordingly the following troops were organized into second division, and the whole placed under Lieutenant General Sir J. Outram:—"One troop horse artillery, one European horsed field battery, one regiment European cavalry, one regiment of Sind horse, one regiment European infantry, three regiments native infantry, with a company of sappers borrowed from Madras, and a mountain train." The 1st Brigade of the second force left Bombay on 19th January and the last on 1st April. On 31st January, 1st Brigade second division reached Bushire, and with them General Outram attacked the enemy at Borazgaon, and fought the battle of Khoo-shab. The force left Bushire on 18th May, to attack Mohumreh which was taken.

The enfield rifle has been partially introduced into the army. The army school has progressed satisfactorily and a school of musketry was opened in November. The results were equal to those of Hythe.

Population.—A new census has been taken for Sind. It shows a total of 17,72,367 of which 7,80,505 are females.

The Mahomedans number 7,58,164 males and 5,97,277 females, the Hindoos 2,03,050 males and 1,60,215 females, Christians and other castes 30,640 males and 22,533 females. "Of the entire male population 46·3 per cent. are cultivators, 114 mechanics, 9·0 shop-keepers, 8·4 shepherds and 8·5 laborers and coolies."

Surveys.—The survey is nearly completed in the Collectorates of the Southern Division, and in Ahmedabad also 102 villages have been surveyed. The survey is followed by a new rate of assessment, and a school-rate of half an anna in the Rupee will be established in every village. The revenue survey in Sind has been commenced in three districts.

Municipalities.—Forty-eight towns and villages have accepted Act XXVI. of 1860 during the year. In the Bombay Presidency town the revenue is still unequal to the expenditure, the receipts being Rs. 4,50,748 and the expenditure Rs. 5,11,494. "The Bombay water-works have been transferred to the hands of contractors, who, though failing to raise the dams to

the height which it was stipulated they should reach by the 10th June, will, it is hoped, be able to store a sufficient supply of water during the monsoon of 1857, to obviate any scarcity of water in the next dry season. Negotiations as to the re-payment by the municipality of the sum to be expended by Government on these works, now estimated at 35 lakhs of Rupees (£350,000) are still unfinished."

The number of persons vaccinated by Superintendents in the year was 2,06,167 and by Civil Surgeons 37,323 a slight decrease on last year. The percentage of successful operations was 91.

In the European army, the deaths of the year were only 1.9 per cent. of strength, and in the Native army 1.06 per cent. The sickness was of Europeans 164.4 per cent. and of natives 125.8 per cent. The number of persons treated in the dispensaries have been 1,05,566.

ADMINISTRATION OF PEGU

For 1856.57.

THE organisation and strength of the establishment maintained for the administration of civil justice in Pegu underwent no change during the year 1856-57. The report contains a brief recapitulation of the number, powers and distributions of the different Courts of civil judicature. "The procedure of all the Courts is guided in the main by a Code of Rules which has been drawn up, with some modifications and improvements, on the basis of those which have long been in force in the adjoining province of Tenasserim. This Code, however, provides little more than a general outline of the rules of practice to be followed by the Courts. In points where it is silent, the Rules and Regulations of the Bengal presidency, so far as they can be made applicable to the circumstances of this province, and so far as they are explained in Macpherson's Code of Civil Procedure, which has been adopted as a text-book, are followed. In the Courts of the Tsetkays and Myo-okes, Burman custom and Burman Law, as laid down in the 'Dhamma That,' or Burman version of the Laws of Manoo, guide the decisions.

"The language of record in these Courts is English, whenever that language is understood by the presiding officer. In all other cases than Revenue and Collectorate ones, the record is written by the officer presiding in the Court.

"Rules have also been laid down for the appointment and remuneration of pleaders in the Rangoon Courts."

Appended to the report is a statement of number of the regular suits and appeals instituted, disposed of, and pending during 1856. The total number of original suits instituted in 1856 was 16,939, whereas in 1855 the number instituted was only 8,857, or just half. The increase though large is not excessive and should be considered satisfactory. Whenever dissatisfied with the decision of an inferior Judge the natives are prompt in availing themselves of the right of appeal. The number of appeals was greater in 1856 than it was in 1855. "The number of cases of all descriptions decided before the various Courts of Judicature in the province during the year 1856 was 22,505. Of these 6,801 were decided by European and 15,704 by Native Judges. Suits regarding the ownership of land, almost unknown in the Burmese time, are now of common occurrence."

The same officers who administer civil justice preside also over the criminal Courts. A full statement of the number of crimes ascertained to have been committed within the province of Pegu during 1856 is appended. In 1855 there were 5,976 crimes of all kinds committed in the province, while in 1856 the number increased to 8,658. An increase is observable in almost every description of crime, particularly in cattle-stealing, the value of the cattle stolen in the year under review being Rs. 11,668 against Rs. 3,150 in 1855, the actual cases, however, are only 310 to 213.

The following is an abstract statement shewing the proportion of criminals to the population in each district:—

Jurisdiction.	Population as per last Census.	Supposed number of persons concerned.	Number of persons apprehended.	Proportion of criminals to population.
Rangoon District,	1,32,643	1,755	1,623	1.25
Rangoon Town,	46,246	1,375	1,275	3.
Rangoon Cantonment, ... ..	.....	1,076	1,013	.....
Bassein District,	1,84,392	2,627	2,576	1.33
Prome,	1,82,015	2,171	2,142	1.20
Henzada,	1,13,857	2,474	2,193	2.30
Tharawaddy,	90,890	901	653	1.
Toungoo,	39,062	285	249	0.65
Total,	7,89,105	12,661	11,754	1.65

The Police are divided into city police, rural police, police battalions, and river police. The city police comprises 44

goungs, 14 jemadars, and 196 peons. The rural police consists of 886 goungs, 266 Loolengs, 64 Myo-okes with 128 peons and 1021 Thooogyees. The police battalions are four in number and are raised for service in Bassein, Prome, Henzada and Tharawaddy, and are 1837 strong. The river police exist only on the Irrawaddy, at present they have 30 boats and excluding 30 steersmen are 184 strong. The expenditure on the Police during 1856-57 was for "city police, Rs. 52,707; rural police, Rs. 1,18,932; police battalion, Rs. 2,38,702; and river police, Rs. 22,108, making a total of Company's Rupees 4,32,449."

In all the stations but Rangoon, Prome and Mengyee, the prisoners are merely confined within stockades of bamboo or other wood. The average daily number of prisoners during the year was 1,399, and the number of deaths was eleven per cent. This percentage is excessive and is attributed to mental depression, for "the volatile temperament of the Burman chafes against confinement." But great as is the dread with which the Burmese regard imprisonment, they hold transportation across the seas in greater horror.

The following is a comparative statement of the revenue of the province :—

	1855-56.		1856-57.	
	Rs.	As. P.	Rs.	As. P.
Land,	9,35,988	7 5½	11,20,374	6 8
Capitation Tax,	7,36,668	14 5	7,84,346	3 4
Fisheries,	2,72,036	10 0	3,14,931	8 0
Salt,	49,715	8 0	24,638	8 0
Forest Produce,	1,650	0 0	1,172	8 0
Abkaree,	1,76,530	10 3	2,98,277	7 0
Sea Customs,	1,70,927	8 2	1,90,687	12 9½
Inland Customs,	3,91,888	13 4	4,08,290	1 3
Municipal Tax,	30,878	7 0	38,686	3 1
Port Dues and other Marine Receipts,	27,501	3 0	31,722	2 11
Rent on Building Lots in the town of Rangoon,	9,869	0 0	45,241	12 0
Timber Revenue,	80,593	14 9	86,243	13 0
Fines and Fees,	74,313	10 0	96,328	3 6
Sale of unclaimed Property,	11,197	9 11	4,807	9 4
Bazaar Rent,	15,233	15 5	12,138	3 6
Ferries,	933	8 0	2,064	0 0
Postage Stamps,	11,750	6 3	11,242	1 6
Miscellaneous,	23,364	5 9½	19,215	9 6
Total,	30,21,062	7 9½	34,90,418	1 4½

The increase in the land revenue of 1856-57 over that of 1855-56, amounts to Rs. 1,84,385-14-2½. This increase is due to the extension of cultivation and greater accuracy of measurement. Tabulated statements are appended to the report.

The comparative statements of rice exports are :—

	Exported by sea. Tons.	Exported across the frontier. Tons.	Total value. Rs.
1855-56,	69,576	57,098	24,93,644-13-4
1856-57,	88,700	37,776	22,59,267-15-3½

The Myo-okcs of townships and Thoogyees of circles 1,086 in number are the subordinate agents to whom the collection of the revenue is entrusted, the "Myo-okcs are paid by fixed salaries, varying from Rupees 25 to 100 per mensem, and the Thoogyees are paid by a commission upon the amount of their collections. This commission is fixed at 10 per cent. up to Rupees 6,000. If the collections of a Thoogyee within the year exceed that amount, he receives 5 per cent. on the surplus.

"The salaries of the Myo-okcs, and the commission paid to Thoogyees, together amounted last year to Rs. 2,45,711-15-10, but this large sum must not be debited entirely to the collection of the revenue, as these officials are also employed on judicial and police duties."

During the year under review the head revenue accountant embezzled Rs. 1,46,671-1-4. "Some mistakes having occurred in consequence of treasury clerks entering sums received under wrong headings, the Deputy Commissioner of Rangoon issued an unauthorized order, that the cash should in future be brought first to the revenue office for the accounts to be made out. This threw the entire control over the money into the hands of the head revenue accountant, a Burman, who proved himself unworthy of the unlimited confidence placed on him by his superior. Having appropriated as much as he considered could be done with safety, he applied for leave of absence to Moulmein, and from thence absconded to Siam, and ultimately to Ava. Upon his disappearance, the defalcation was discovered."

Below is a comparative statement of the exports and imports of the last two years :—

YEARS.	IMPORTS.		EXPORTS.		TOTAL.	
	Rs.	£	Rs.	£	Rs.	£
1855-56,	1,26,54,710	1,265,471	66,36,785	663,678	1,92,94,495	1,929,449
1856-57,	1,39,40,334	1,394,038	85,11,437	851,143	2,24,51,771	2,245,177

The foregoing statement includes treasure. A remarkable increase in the trade of petroleum occurred, in 1855-56, the quantity exported was 110,822 gallons valued at Rs. 16,257; in 1856-57, the quantity exported was 707,791, valued at Rs. 2,24,150. The wells producing this substance are within the territories of the king of Ava and the working of them constitutes one of the royal monopolies.

No distillation is allowed in Pegu, but all imported liquor pays a customs duty of Re. 1-8 per gallon.

There is no poppy cultivation in Pegu, and the import of opium by private individuals is strictly forbidden.

The amount of revenue recommended for remission amounts to not quite 2 per cent. on the collection, in 1855-56 it was a little more than $1\frac{3}{4}$ per cent.

Education proceeds but languidly, owing chiefly to the difficulty experienced in procuring persons qualified by their knowledge of Burmese to act as masters in Anglo-Vernacular schools. Only one such school has been established in the provinces. Grants-in-aid to the amount of Rs. 2,700 have been extended to three schools.

As noticed in the last report, efforts have been made by Government to reclaim the various tribes of Yaings or wild Karens who inhabit the Pong-loung hills. The result of these efforts Mr. O'Riley thus summarises "of the large communities of those wild races who people the mountain ranges of the Pong-loung, aggregating a total of from 55,000 to 56,000 souls, fully one-third have, during the past three years, received the light of civilization through the combined agency of Government, and the Karen Missionary Qualah, with his assistants, have cast aside their former evil practices, and cemented a bond of amity and brotherhood with their kindred tribes, have raised themselves in the social state by the adoption of the pure faith of Christianity, and will eventually be found willing recipients of our laws to render them useful subjects of our Government.' Neither the teachers, nor the head of the Karen Mission, the Reverend Qualah, who is a member of the American Baptist Mission Society, receive any support from Government. They are entirely maintained by their respective communities. The only pecuniary aid furnished by Government is that of Rupees 30 per mensem to each of the 'Na-khans.' Aid has been granted by Government to the extent of Rupees 2,000 to the Reverend Dr. Mason, a member of the American Baptist Mission Society, to print and publish some useful elementary works in the dialects of the Mauniephgas and Bghais, the two principal tribes of the Pong-loung range. These languages have now for the first time been learnt and reduced to writing by the above-mentioned gentleman. Mrs. Mason has commenced a school for the education of Karen and Burmese females at Toungoo. The expense for the buildings and establishment has been raised by private subscription, Government contributing the timber; and it is intended that the principle of its operations shall be that of a self-supporting system of training and education."

The Public Works report merely details the progress that has been made in the construction of two or three important roads, and the outlay on the town of Rangoon. The total expenditure on the town of Rangoon in 1856-57 amounted to Rs. 2,12,357-14-10 making with the expenditure of former years an outlay of Rs. 14,03,203-5-3.

"There are three great lines of postal communication, all of which are by water. They are—1st, from Rangoon to the frontier and intermediate stations on the Irrawaddy; 2nd, from Rangoon to Shwaygyeen and Toungoop up the Sitang; and 3rd, from Rangoon to Bassein and Dalhousie through the creeks of the Delta. On the first line the mails are carried in the Government steamers with regularity and despatch; on the second, country boats are the only means of transport available; and the difficulties and dangers of the Sitang render any great speed or certainty unattainable. On the third line, the mails are carried sometimes by steamer, but generally by boat. The arrangements for the speedy transit of letters on this line, one of great importance, are susceptible of much improvement."

It is not thought that any great success would attend the introduction of thannah or district daks. In the present condition of the people they would not supply a want.

"A line of Electric Telegraph, connecting Rangoon with the frontier post of Meaday, was completed in February, 1856, and has been in good working order ever since. It follows the course of the Irrawaddy, passing through the three stations of Henzada, Mengyee, and Prome, where there are signalling offices. Its entire length is 211 miles. It was erected at a cost of about Rupees 462 per mile. Another line has been commenced up the valley of the Sitang, which will connect the isolated post of Toungoo with Rangoon and with the intermediate stations of Pegu and Shway-Gyee." A line of Telegraph to connect Rangoon with Calcutta *via* Arracan is in contemplation.

A detailed account of the Government flats and steamers was given in last report, and summarised in a former number of these Annals. There is one sea-going steamer of 514 tons attached to the province and six river steamers with flats, capable of transporting 3,000 troops. All the steamers but one are old and have seen much service. The receipts of the Rangoon port-fund between 1st November, 1856 and 30th April, 1857 amounted to Rs. 14,891-15 and the expenditure during the same period to Rs. 11,967.

The following is a comparative statement of all disbursements:—

	1855-56.	1856-57.
	Rupees.	Rupees.
"Judicial,	9,78,668	9,52,480
Revenue,	2,16,470	2,72,101
Customs,	62,524	70,057
Marine,	1,10,425	8,89,167
General,	3,33,094	4,78,928
Total, ...	17,01,181	26,62,734"

It is proposed to erect churches at the three principal stations in Rangoon where European troops are stationed and where Government chaplains, including three Roman Catholic chaplains are permanently resident. A grant of Rs. 7,000 has been made by Government for the erection of a Roman Catholic church at Thayet-myo, and an application for a similar grant to Toungoo has been made.

The political report exhibits no great change, the king of Ava still continues to profess that pacific and friendly disposition which he so conspicuously displayed in 1855, and for the rest, the wild tribes of Red Karens live in perpetual feud with one another.

The only civil corps under the orders of the province is the Pegu light infantry battalion. For this corps it was proposed to recruit Malays, but in three years only 155 enlisted and that at a very heavy expenditure. The strength of the corps on the 1st May, 1857 was 638, of this number all were Burmese except 133 Malays. The authorised strength of the corps is 928 and its cost in 1856-57 was Rs. 1,06,390-2-10. This sum did not include Rs. 6,580-8-4 spent on the recruiting party at Singapore. No difficulty has been found in keeping up to their full complements the police battalions.

The population of Pegu is estimated at 7,89,105 of which 4,08,366 are males. This shews an increase of 2,06,852 over the returns of 1855-56. There is a report by Dr. Stewart on the supposed causes of the scantiness of the population appended. The great want of Pegu is population and immigration should be encouraged.

With regard to agriculture it may be observed that the staple produce of Pegu is paddy. Cotton is grown and the mulberry tree cultivated for the support of silk worms. Cattle are exceedingly scarce, and their scarcity is increasing. Measures are in contemplation to remedy the evil by the establishment of breeding farms. "There are three methods by which forest revenue has been obtained in this and the adjoining provinces by the British Government. They are—1st, levying a duty *ad valorem*, or

otherwise, on timber felled and brought down by private parties; 2nd, selling the whole of the seasoned timber in the different forest tracts to the highest bidders; 3rd, felling and bringing down the timber on account of the forest department, and disposing of the same by periodical sales to the highest bidders.

"The last being the plan preferred by the Supreme Government, is in future to be the rule for conducting operations in the forest department in this province, as it has been during the greater portion of the past year. The plan of raising a revenue by levying a duty on *bona fide* private timber, or by the sale of seasoned wood in the forest tracts, has been abandoned."

The statement of the receipts and disbursements of the forest department exhibits an excess of the former over the latter of Rs. 81,065-1-3½.

The report here makes some remarks on the topographical survey commenced in December, 1853, and says that the time has hardly yet arrived for the commencement of a regular revenue survey.

The report concludes with the names of those officers whose services entitle them to particular mention.

ADMINISTRATION OF THE STRAITS SETTLEMENTS

For 1856-57.

THE Straits Settlements are under English law administered in recorder's courts. Act XIII. of 1856, having become law on the 1st January, 1857, a great change has been effected in the constitution and organisation of the Police, but the effects of this change are not yet apparent. By that Act the Police is to be paid from the municipal fund, but placed under the control of the Executive Local Government. Owing to the absence of any definite Police law, and to the consequent impossibility of properly training the Police bodies, they have been wanting in efficiency. But considering the disadvantages under which the Police has laboured, the amount of crime does not shew any increase over that of the preceding year. The percentage of crime to population in 1855-56 was 35, and in 1856-57, it was 42. The greatest increase of crime is observable in Penang.

Dissatisfaction with the working of the Police has occasioned during the past year two disturbances, in both of which several lives were lost. The subject of secret associations amongst the

Chinese has several times been publicly brought forward. It was suggested that a power of deportation should be vested in the Governor, independent of law and held *in terrorem* over the leaders of these societies, but the suggestion was not approved by the Supreme Government. At each station there are two jails, one attached to Her Majesty's Court of Judicature and the other styled the House of Correction. All the jails are good but those at Malacca, where fresh will be erected. The returns of the Houses of Correction need not be summarised. The total number of transported convicts in the Straits at the close of the last official year was 4,024, of whom 3,816 were males and 208 females. The total expense of this body during the year was Rupees 1,98,280-11-8, being at the monthly rate of Rs. 4-1-8 per head.

The total revenue of the Straits Settlements during the past year as compared with the former year is as follows:—

		1855-56.	1856-57.
"Excise, ...	Rs.	7,25,337 13 10	7,90,615 5 4
Land, ...	"	1,73,878 2 4	1,69,224 9 4
Miscellaneous, ...	"	1,70,235 0 0	2,03,168 2 3
Total, ...	Rs.	10,69,451 0 2	11,63,008 0 11

showing an increase during the past year of Company's Rupees 93,857-0-9." The disbursements including the military were Rs. 8,74,941-6-3.

There are no purely Government educational establishments in the Straits, but the Government subscribes to a Protestant Free school at each station. Of all Asiatics probably the Malay is the least susceptible of improvement from education.

The Public Works and Post Office reports contain nothing worthy of remark.

Gun-boats are attached to each station and a steamer is generally stationed at Singapore. These boats are necessary to protect the shipping, of which 2,334 square-rigged and native vessels visited Penang and 3,919 Singapore during the past year. The ports of Penang and Singapore have been placed under the provisions of Act XXII. of 1855.

The report here remarks on the ecclesiastical, military and municipal establishments of the Straits Settlements.

The imports of Singapore during 1856-57 were Rs. 5,28,44,988 and the exports Rs. 4,77,76,981. The imports and exports of 1855-56 were respectively Rs. 5,14,44,228 and 4,42,21,516. The trade of Malacca is too insignificant for mention and from Penang no returns have been forwarded.

ADMINISTRATION OF THE TENASSERIM AND MARTABAN PROVINCES

For 1856-57.

THE Tenasserim Provinces comprise an area of 38,000 square miles. Since the conclusion of the late war the province of Martaban has been added to the jurisdiction of the Tenasserim Commissioner. This province includes an area of about 9000 square miles. "During the Burman occupation of the country, the coast tracts of Martaban and Tenasserim were peopled for the most part by Talions of the old kingdom of Pegu, and this race, which possesses some distinctive features from that of the Burmans, still preponderates in the numerical status of the population. In 1826, when the British became possessed of the Tenasserim Provinces, the population was estimated at 90,000, and of the Martaban Province, on its conquest in 1852, at 78,328. The population of the former provinces by last year's census was 2,13,692 and of the latter province 88,962."

The hill tribes of Tenasserim are Karens. The standard language of the country is Burmese and the inhabitants are mostly Buddhists. "The Tenasserim and Martaban Provinces comprise the provinces of Amherst, Tavoy, Mergui, and Martaban, each being under the charge of a Deputy Commissioner.

"Subordinate to the Commissioner are Deputy Commissioners in charge of provinces, the Magistrate of the metropolis of Maulmain, Assistant Commissioners, Tscetkays or Native Judges, Goun-gyouks and Myo-thoogyees presiding as fiscal and judicial officers over divisions of provinces, Thoogyees or Native Revenue Collectors, and Gounks (Native Constables) in charge of wards of towns."

The system of administration is the same as that pursued in Pegu.

The number of civil suits instituted in the Courts in 1856-57 was 8340, the number of appeals was 566. Litigation is on the increase.

The civil judicial officers also administer criminal justice. The report contains tabular statements shewing the nature and extent of the crimes committed. The ratio of crime to population is in the Tenasserim Provinces as 1 to 560, and in the Martaban Provinces as 1 to 753. The proportion of convictions to arrests in all the provinces was during the past year 61 per cent.

The Police establishment is similar to that maintained in Pegu and there is a small Police levy raised from the Karens, about 200 strong.

There are five jails in the provinces and the total average number of persons confined was 2,421 and the cost of their maintenance Rs. 34 per head. The proportion of deaths to strength is $6\frac{1}{2}$ per cent. The convicts are divided into six classes, ticket-of-leave convicts, convict Police, prisoners who have been well behaved during five years' confinement, who receive full rations and a monthly allowance of 1 Rupee, the probationary class, the incorrigible and the superannuated. The convicts are employed on roads, bridges, drains and manufactures. The amount realised on articles manufactured by convicts in the Maulmain jail and sold during the year was Rs. 6,841-5-9.

The following is a statement of the revenue :—

ITEMS OF REVENUE.	TENASSERIM PROVINCES.	MARTABAN PROVINCES.
	1856-57.	1856-57.
Rice Lands,	2,15,998 13 8	1,99,778 2 11
Garden and Miscellaneous Cultivation,	55,153 15 3	9,530 5 10
Capitation Tax,	57,422 0 0	82,267 0 0
Timber Revenue,	2,40,254 1 8	0 0 0
Excise, including Opium, ...	1,59,560 11 0	49,870 8 0
Marine Receipts,	49,723 4 6	0 0 0
Judicial Receipts,	92,210 14 8	6,175 7 6
Postage and Postage Stamps,	8,891 5 2	1,211 12 0
Customs Remittances, . . .	93,534 3 7	0 0 0
Miscellaneous,	16,777 3 10	21,871 9 3
<hr/>		
Total,	9,94,526 10 4	2,80,704 13 6

“ The revenue is rapidly increasing, and with slight modifications would yield sufficient to pay all expenses, civil and military, with an excess for the general purposes of the State.”

The report here proceeds to remark upon each of the foregoing items.

There is only one Government school in these provinces, “ which was established in 1845, and is in the town of Maulmain. The average daily attendance is 96 pupils. “ Government also supports several of the American Baptist Missionary Burmese and Karen schools by grants-in-aid. The

number of these schools in Amherst Province, including the town of Maulmain, is sixteen, with an attendance of 320 pupils; in the Tavoy and Mergui Provinces, fifteen schools with 196 pupils, and in the Martaban Province two schools with 20 pupils.

" Besides the above schools, there are schools in all the Buddhist monasteries, several of which exist in every town and considerable village. The Buddhist priests are the school-masters, and the education is gratis. Every pupil is taught to read and write his own language and the rudiments of arithmetic. The books chiefly studied are abstruse works connected with the Buddhist religion. The priests, though far from being bigotted, have an objection to our printed books, religious or otherwise, being admitted into their monasteries."

The Public Works report details the work that has been done on the roads and the canals between the Salween and Sittang rivers. A new main wharf is in construction at Maulmain the cost of which is estimated at Rs. 35,491-2-10. The work is carried on solely by convict labour. " The up-country mail through the Martaban Province to Tounghoo is conveyed during the rainy season by boats as far as Dunnoo, 47 miles from Maulmain, where a Post Office agent is stationed, and from thence overland by post-runners to Kan-ka-dook, a distance of 38 miles; from this the mails are conveyed throughout by water to Sittang, Shoay-Gyeen and Tounghoo, where the line ends. During the dry season the mails are conveyed for some two-thirds of this distance overland by post-runners. The mail route from Maulmain to Tounghoo is computed at 334 miles. From the swift current of the Salween and Sittang and their tributaries during the rains, and the difficulty of travelling by land in the dry season from the want of roads, the rate of travelling of the mails is not satisfactory. " Mails for the southern provinces of Tavoy and Mergui are conveyed once a month from Maulmain by H. C. steamer *Pluto* placed on this station, and during the fine season also, by small native coasting craft." The Maulmain Post Office is the central office of these provinces and the average monthly receipt of mails is 180 and 140 mails are despatched.

A line of Electric Telegraph from Rangoon to Tounghoo via Shoay-Gyeen has been commenced and a line has been proposed from Maulmain to Amherst town a distance of 25 miles. " The vessels stationed in this province for purposes of communication with the several ports, Amherst, Tavoy and Mergui, are the *Pluto* steamer (sea-going) and the *Amherst* schooner, which run regularly, carrying mails and affording passage to Pilots and passengers generally. " Pilots, after passing an examination as to their knowledge of the river navigation, are permitted to exercise

their calling in taking ships up and down the river. They receive four-fifths of the amount of pilotage incurred by the ship, the remaining portion being retained by Government to provide for the expenses of the port.* Over these Pilots a Government Pilot is entertained on a salary of Company's Rupees 200 per mensem, who, besides superintending the department generally, pilots all Government vessels." It is proposed to levy port dues at Maulmain. The receipts were Rs. 49,723-4-6 and the disbursements Rs. 1,80,552-9.

"During the past year, and up to the present period, the quiet of the Martaban Province has been disturbed by the appearance amongst the Karens of a person (supposed to belong to the Karens of Bassein) who has assumed the title of 'Meng-Loung,' or the incarnation of a great Prince. Such a person, in the wild legendary lore of the Karens, it was predicted would appear amongst them, and after driving out the 'Kullahs' or foreigners, effecting the supremacy of the Karens in the mountain tracts of the Yoonzaleen, would proceed thence to Pegu, and establish a new dynasty of their race. Aided in his imposition by some sleight-of-hand tricks, the simple Karens placed implicit faith in his divine mission, and to the number of 1,200 to 1,500 men associated themselves with him, and proceeded to coerce all the Karens of the hill tracts in the vicinity of the Yoonzaleen. This body of Karens subsequently descended to the plains, and after destroying several villages, and driving the inhabitants into Shoay-Gyeen, retreated hastily into the hills before a force composed of European soldiers, sepoys, and native Police, which accompanied Major Berdmore, the Deputy Commissioner, and Lieutenant Sladen, the Assistant Commissioner, from Sittang. Driven from the Yoonzaleen, the chief and headman of his party sought refuge amongst the Siamese Shans of the Zimmay State, and on the return of the force to Shoay-Gyeen and Sittang, they re-appeared on the scene of their first operations, and resumed their system of annoyance and aggression on the villages, descending into the plains, and latterly attacking the large village of Kyouk-kyee, from which they were repulsed with considerable loss by a detachment of the 8th Regiment M. N. I., under the command of Lieutenant Childs.

"From the latest reports received, it would appear that the present chiefs or Meng-Loung has assumed the character of ruler of the country, and having collected around him the loose characters and evil disposed of the surrounding countries, Shans, Karen-Nees, and Karens, has reduced that tract of country to complete subjection. "For the effectual settlement of the country, the scene of the present disturbance, it is intended to raise a force of Karens of the locality during the next dry season and

sweep the whole mountain district through, by which agency, backed by armed Police stationed at several of the most accessible points, it is hoped that this pseudo-prince and his band of marauders will be exterminated, and peace and tranquillity secured to the Karens for the future."

The report here states the objects of the missions deputed in 1831—36, under Captain McLeod and Dr. Richardson to Ava, Bangkok and certain of the Shan States.

No European troops are stationed in these provinces and the Burmese do not hold sepoy troops in any great respect. It is proposed to raise a force from the inhabitants of the country, but it is thought that the Burmese could not readily be induced to enlist.

The steamer *Pluto* has been employed in keeping up a constant communication with Penang in order to induce immigration. The measure has not been very successful.

Teak nurseries have been formed, which will however prove of little use until the forests intended for the new plantations are isolated from the Karen locations.

Iron is very abundant particularly along the beds of the Tavoy river and its branches. Coal has been discovered to the southward of Maulmain. A vein of pyritous coal near *Mergui* was for a time worked, and coal from it supplied to "H. C. steamer *Madagascar* on her voyage to China, and owing to its spontaneous combustion, the vessel was destroyed, since which the coal of that locality has not been worked." Tin, gold, copper, lead, antimony, plumbago and limestone are all obtainable in considerable quantities. "A topographical survey of the province of Martaban was commenced in March, 1853, by Mr. Hobday and completed in April, 1856, when a map of the country was submitted to Government and lithographed. The survey comprised the laying down of the road from Martaban to Tounghoo, and a road from Dunnoo *via* Kyouk-tsaycet to Beeling. The courses of all the principal rivers and streams, position of villages, &c., were checked by astronomical observations. An establishment for a general survey of the Tenasserim Provinces has also been sanctioned."

ADMINISTRATION OF MYSORE

For 1856-57.

"IN the judicial department of the Mysore administration this year has been marked by the appointment of a judicial Com-

missioner. The object of this appointment was to relieve the sole Commissioner from an amount of work which was found to interfere injuriously with his labors in other departments. The office was first temporarily filled by Major Haines, the Superintendent of Bangalore, who, while in charge of that important division, had shown himself particularly qualified for an office of this nature. Major Haines took charge on the 22nd May, 1856, and was relieved on the 8th September by the Hon'ble Mr. Devereux, of the Bengal Civil Service, who was formerly himself a Superintendent under the Commissioner of Mysore, and well acquainted with the local judicial system and the habits of the people."

There are ninety-five local Courts in the Mysore territory, of which ninety-one are subordinate Courts under the general control of four Superintendent's Courts, and two other Courts, the judicial Commissioners and the Huzoor Adawlut. The number of original suits disposed of during the year was 9,881 and 2,632 remained in arrears. In 1856, 3886 remained in arrears. The number of appeal suits filed during the year was 1,096, of which 884 were disposed of. Of original suits 79·4 per cent. were decided in favour of the plaintiffs and of appeal suits 42·2 in favour of the appellants. Half of the original suits decided in 1856-57 occupied only three months, but 336 had been pending for more than two years. Of the appeal suits one-fourth were decided within three months of being filed, one-half within one year and 85 after having pended for more than two years.

Of criminal offences there were filed during the year in the judicial Commissioner's Court forty-two cases and in the Lower Courts 11,552, *viz.* against the person 635 cases, against property 3,095, miscellaneous 368 and petty offences 7454.

"In the crimes attended with violence, the most marked thing is an increase of 42 in the assaults with wounding, and a decrease of 93 in the cases of robbery. A great proportion of the murders and manslaughter cases arise from motives of jealousy, and very frequently, from the offensive language used by females towards their husbands, whose anger or suspicions have been excited.

"The total number of cases and of prisoners apprehended in the past year, was 11,552 cases and 24,206 prisoners, against 11,540 cases and 23,793 prisoners in 1855-56. Of the prisoners so apprehended, 13,971 or 58 per cent. were convicted, against 14,408 or 60 per cent. in 1855-56. Of the whole number of 13,971 prisoners, who were convicted in the past year, only 2,925 were sentenced to imprisonment or to capital punishment. Of these, 1,831 received not more than one month's imprisonment; 914 from one month to a year; and the remainder, 180,

who include the whole of the convictions for grave offences, were punished by a higher penalty. Those fined, flogged, dismissed from office, &c. were 11,046 in number."

The value of the property proved to have been stolen was Rs. 40,012-13-11, of which Rs. 19,877-11-10 was recovered.

"The total average number of convicts in confinement on the 1st of each month was 1,620, of whom 1,222 performed labor in jails and 398 in road gangs. Of the latter number only 2 died, a fact which tends to show the superior healthiness of the road-work over that in jails, for in the latter 71 died. Due allowance, however, must, of course, be made for the consideration that the prisoners of strongest bodies are selected for road-work

"The expense of feeding, clothing, and supplying medicines to the prisoners was Rupees 42,070, and of guards Rupees 21,914-0-0, making altogether Rupees 64,014-0-0, and assuming 1,620 to be the actual number of prisoners throughout the year, the cost per head for feeding, &c, was Rupees 25-15-6, and for guards Rupees 13-8-9, or on the whole Rupees 39-8-8.

"The jails at Bangalore are remarkable, in like manner as they were last year, for the low average of deaths. The credit of this must be divided between the good management of the authorities, and the healthiness of the climate."

The only measure of much consequence in the past year has been the increase of the pay of a part of the Police. The pay which ranged as low as Re. 1-8 has now been fixed at a minimum of Rs. 3 per month. In conclusion it is remarked that the population of Mysore is estimated at 36,29,577, which as compared with the number of civil suits gives only 238 per hundred thousand, and as compared with the criminal offences and misdemeanours only 310 9 per one hundred thousand.

"The demand or revenue settlement for 1856-57 on account of current revenue, exclusive of arrears, amounted to Rupees 79,99,715-4-10 as shown below:—

" Ordinary Revenue.

Land Revenue,	57,02,322	10	1
Sayer,	7,53,158	15	5
Abkarry,	6,69,142	5	10
Miscellaneous,	5,90,568	9	3

Extra Revenue.

Sandak Wood,	1,32,254	15	0
Miscellaneous Sources,	1,14,731	1	11
Tuggerly,	7,536	11	4

Total, 79,99,715 4 10"

The principal occurrence in the course of the year in the educational department was "the submission to the Government of India of a general scheme of education, embracing the support of an English school in each of the four divisions, and a vernacular school in each of the eighty talooks of Mysore. This scheme received the sanction of the Right Honorable the Governor General in Council on the 6th of February last, and an assignment of one lakh and twenty-five thousand Rupees per annum was made for its maintenance. Up to the 30th April, however, no steps had been taken to extend the system in accordance with this liberal sanction, and whatever measures may eventually be adopted will appear in the report for the current year."

The amount contributed by Government for educational purposes during the year was Rs. 21,686 and that from private sources was Rs. 26,005-11-4. These funds have furnished the means of instructing 1,685 pupils, of whom 842 studied English.

The Public Works department exhibits nothing worthy of notice, the large sum of Rs. 2,16,948 was expended on sundry repairs of irrigation works.

The total receipts of the Mysore territory during the year were Rs. 1,43,84,687 of which Rs. 82,29,149-6-8 was expended.

The report proceeds to remark on emigration, agriculture, forests, mining, hospitals and dispensaries, and vaccinations, as these subjects affect Mysore. The quantity of iron produced in the year was mds. 58,054 of which 57,066 mds. valued at Rs. 87,846 were exported.

The strength of the Mysore infantry was on the 30th April, 1857, 1,662 rank and file, and of the Silladar horse was 2,745 sabres. These were maintained at a charge of Rs. 10,15,555 5-1.

ADMINISTRATION OF THE HYDERABAD ASSIGNED DISTRICTS

For 1856-57.

On the 30th January, 1856 the Government of India directed the abolition of the Moonsiffs' Courts and the introduction of the Punjab system. The Moonsiffs' Courts were therefore gradually abolished and at the date of this report Moonsiffs alone remained in Ellichpore, Oomraotee and Nuldroog. The Small Cause Courts now existing are:—

"In North Berar,	...	...	...	..	16
In South Berar,	..	..	..	..	6
In Nuldroog District,	...	..	..	..	7
In Raichore Doab,	..	..	..	..	13
Total,	..	...	...	..	42

"This gives an average area of about 640 square miles to each Court. But the whole arrangement will be revised when the strength of the establishments is determined."

The number of civil suits instituted in 1856-57 was 7,096 and the average value litigated in each suit was Rs. 196-15-11. The number of suits decided on merits by Deputy Commissioners was 6, by Assistant Commissioners was 11, by extra Assistant Commissioners was 7, and by Moonsiffs and Tehsildars was 3,425.

"Difficulty arising from the Surf-i-khass estates, or crown lands of the Nizam, which are interspersed with the assigned territories, meets us in the arrangement of the civil Courts, and indeed in almost every branch of the administration. The revenue management of these estates is in the hands of the talookdars and naibs appointed by the Nizam, while the Police and Criminal and Civil Justice are under this administration. Here, therefore, the principle of the union of authorities cannot be carried out, and the Courts, as far as those estates are concerned, are really Moonsiff's Courts. It will doubtless be the aim of the Native revenue authorities to prevent the ryots of these estates seeking the interference of any but themselves in the settlement of their affairs, and a great deal of jealousy has already shown itself. Several of these estates are of very large size, equal indeed to talooks, while others are small and scattered."

The number of persons imprisoned for debt on the 31st December, 1856 was 32.

The following table exhibits the ratio of crimes to population committed during the year under review :—

Population.	Years.	Total of reported crimes.	Ratio per cent. to Popln.
24,88,573	1855,	4,147	0.167
	1856,	7,032	0.280

The following shews the amount of property reported to have been plundered and the proportion recovered :—

	Estimated amount stolen.	Amount recovered.	Proportion per cent.
1855,	Rs. 49,289-15-4	11,033-13-2	22
1856,	Rs. 53,214-14-8	14,342-6-10	26

The number of persons tried for criminal offences was 8,769; of these 7,350 were convicted, and 1,419 acquitted.

The report here gives a long extract from a manual of judicial administration shewing the relative position of different branches of the Police in these districts. The Police were composed of 8 ameenas, 18 cutwalls, 34 jemadars, 13 darogahs, 4 naib duffadars, 18 duffadars, 14 mootsuddies, 19 mohurris, 46 naibs, 1,164 peons, 49 sowars, and 5 bheesties, and cost Rs. 1,20,242 per annum. The Raichore Doab is the district

in which the Police have been most completely established and South Berar is that in which least has been done. Besides the general Police establishment, other Police under various denominations amounting to 12,478 persons are maintained. The cost of this body of men is not given in the report.

"In reviewing the reports of all the officers one fact is very conspicuous, namely, that all appear to consider that the success of our management is mainly dependent upon a successful organization of the rural Police. The district Police is necessary to guard the frontier and the high roads, to escort prisoners, to protect travellers, to watch the bunjarahs and other wandering tribes, and to repress the more violent crimes ; but they should be restricted from interference with the villagers, except when their aid is sought by the heads of villages. This principle has been clearly stated in the manual, and I am glad to find that the experience of the Deputy Commissioners is all in favour of leaving the villages as much as possible to self-government.

"No suitable jails having been built in these districts, the prisoners were scattered in a way which precluded the enforcement of any proper discipline. In North Berar they were confined in six jails, in South Berar in three jails, in the Nuldroog district in three jails, and in the Raichore Doab in two jails.

"Under date the 29th September, 1856, the Commissioner laid before the Government his views on this subject. The Commissioner proposed that a central jail should be formed in the Nuldroog district for the convicts of that district, for all sentenced in Raichore to more than one year's imprisonment, and for all sentenced in North and South Berar to more than three years, and that a jail should be built at the capital of North Berar for all of the remaining prisoners of the two Berars, except those of South Berar sentenced to three months and under, who would be confined in penitentiary in South Berar. Thus the buildings required would be one central jail calculated to contain from 800 to 1000 prisoners ; a jail in North Berar for 300 ; a jail in the Doab for 180 ; and a penitentiary in South Berar for those guilty of petty offences, with a ward for prisoners on trial. By this system all convicts subject to long imprisonment would be brought together and subjected to discipline under proper superintendence.

"The orders of Government were issued on the 4th May, 1857, approving of the proposed arrangements, and sanctioning the appointment of a medical officer as Superintendent of the central jail. Dr. Fleming has since been appointed, and has been engaged in drawing up a set of rules for the management of the jail, and in making temporary arrangements for the accommodation of the prisoners in the fort of Nuldroog, and he

will shortly submit a plan for converting that fort into a jail." The average number of prisoners in confinement during the year was 1,639, and the mortality was only 5. The total cost of the jails was Rs. 43,371-4, in 1855 it was Rs. 30,688-15-7. These statements include the pay of the jail guards and contingencies.

The system of land assessment adopted has already been reported on. In the year under review few changes have been made. The survey of the assigned districts is now under the consideration of the Supreme Government. The land revenue demand in 1856-57 was Rs. 41,54,099. In 1855-56, the demand was Rs. 40,70,406. It was anticipated that nearly all the demand would be realised. The total land in cultivation amounted to 48,14,539 acres, and the average assessment was Rs. 2-10-9 per acre. The assessment however is very unequal, the highest assessment in the Raichore Doab being Rs. 30 per acre and the lowest assessment in South Berar being six annas six pie. The assessment is not excessive and as compared with Madras is light. The report contains detailed statements from the four provinces of the assigned districts. The only taxes exclusive of those on land that are now levied are on spirituous liquors, opium, ganja and other drugs, salt wells and stamps on law proceedings and deeds. The total revenue from extra sources was as follows:—

"Sayer, 4,392; abkarry, 2,22,047; opium and drugs, 13,446; stamps, 15,803; salt pans and wells, 29,213; saltpetre, 1,500; alkali, 8; district post, 55; ferries, 57; and miscellaneous, 75,735; making a total of 3,62,256."

If we combine the extra revenue with the land revenue we obtain a total of Rs. 45,16,355 of which two-thirds is contributed by North Berar and one-fourth by the Raichore Doab. The outstanding balances at the close of the year amounted to Rs. 4,01,980, at the close of 1855-56 they amounted to Rs. 3,81,566.

Towards the education of the populace of these districts nothing has been done during the past year, but the employment, as a temporary measure, of three Canarese teachers for the tuition of village school-masters. In South Berar there is not a single English school and only one hundred and seventy-four vernacular schools. The number of scholars out of a population of 5,18,000 is only 1,236, or 3 per cent.

The Department of Public Works was established under date the 22nd February, 1856 and the Chief Engineer appointed. The estimates for the districts were not fixed till the 27th March, 1856. The works most emergently needed were "the opening out of the principal lines of road through the centres of the

districts ; the restoration of ruined works of irrigation ; the construction of tanks in the Nuldroog district ; and the erection of the necessary public offices." It is believed that there is not a single bridge in any one of the assigned districts. The Government have sanctioned the levy of one per cent. on the land revenue for a road fund, and, during the year 1857, advanced Rupees 10,000 for each district. There were 221 miles of road opened out in all four districts. In the Nuldroog district 123 miles were opened out and in South Berar only 13. The Post Office report contains little worthy of notice.

The electric telegraph passes over a corner of the Raichore Doab, but there is no station within the assigned territories.

The results of the fiscal administration may be thus tabulated :—

	North Berar.	South Berar.	Nuldroog District.	Raichore Doab.	Resident's Civil Treasury.	TOTAL.
Total Receipts, ...	17,31,870	7,51,434	9,16,353	11,79,110	997	45,79,764
„ Disbursements, ...	2,60,026	1,41,237	1,55,355	1,34,465	1,96,809	8,87,892
Net Revenue, ...	14,71,843	6,10,197	7,60,998	10,44,645	0	36,91,872

The Company's coinage is now current throughout the territories reported on. For a time the Company's coins were at a considerable discount and the local coins had a fictitious value. No remittances in specie were made during the year, the remittances in bills amounted to Rs. 10,38,000, but the Resident at Hyderabad indented on the Accountant General of Bombay for Rs. 2,28,784-0-10.

The only events of political importance have been the recognition of the Rajah of Gudwal as a tributary prince, and the declaration that the officers of the Serf-i-Khass estates are precluded from levying transit duties. In conclusion it may be observed that if "little progress has been made in the past year in completing the administrative system of the assigned territories, still a survey of the position of the territories and of their future prospects gives every reason to hope that they have hitherto benefited, and will hereafter greatly benefit by British rule. It has been shown in the above report that they have been relieved from every injurious tax ; their commerce has been freed from all imposts, and their produce can reach the great markets of India unimpeded by any duties whatever. The land rent is nowhere oppressive, and compared with the assessments of Madras, is light. There is thus every reason to hope that the territories will afford the means necessary for their prosperity by the establishment of an efficient Police, by roads and bridges, by educational institutions, and by hospitals and dispensaries, to be begun now, and developed with the expanding resources of the country. The

territories will at the same time benefit the British Government by the increased exports, and that of His Highness the Nizam by the surplus revenue which can hardly fail to be created."

The appendices have been summarised in the body of the report.

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